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FILE COVERS 1950 TO PATENT PUBLICATION DATE: 23 Dec 1997 (19971223/PD)

FILE LAST UPDATED: 6 Jan 1998 (19980106/ED)

HIGHEST PATENT NUMBER: US5701603

UNITERM INDEXING LAST UPDATED: 23 Dec 1997 (971223/UP)

INDEXING CURRENT THROUGH PAT PUB DATE: 26 Aug 1997 (19970826/PD)

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=> s ((34553 or 34615)(1)(33696 or 33697 or 33698 or 33700 or 34140 or 34141)(1)(30971 or 30972 or 30973 or 30295))/fg

```
34553 R I C3N3 1,3,5-TRIAZINE RING (P)
```

34615 R I C4N2 PYRIMIDINE RING (P)

33696 F O ETHER FG (M)

33697 F O ETHER FG (P-1)

33698 F O ETHER FG (P-2)

33.700 F O ETHER FG (P-4+)

34140 F S SULFIDE, THIOETHER FG (P-1)

34141 F S SULFIDE, THIOETHER FG (P-2+)

30971 F CO2 CARBOXYLIC ESTER FG (P-1) 30972 F CO2 CARBOXYLIC ESTER FG (P-2)

30973 F CO2 CARBOXYLIC ESTER FG (P-3)

30295 F CHO2 CARBOXYLIC ACID FG (P-1)

11714 34553/FG

14758 34615/FG

86203 33696/FG

149329 33697/FG

109553 33698/FG

68891 33700/FG

59804 34140/FG

26578 34141/FG

110265 30971/FG

59358 30972/FG 28603 30973/FG

106072 30295/FG

9026 ((34553 OR 34615)(L)(33696 OR 33697 OR 33698 OR 33700 OR T.1

```
=> s l1(notl)(34211 or 33918 or 34128 or 33962or 33079 or 30384 or 30321 or
33895 or 30602 or 33979 or 33847 or 30995)/fg
34211 FUSED OR BRIDGED RING (M)
33918 F O3S SULFONIC ACID, SULFONATE FG (M)
34128 F QUATERNARY AMMONIUM FG (M)
30384 F CNO2 CARBAMIC ACID, CARBAMATE FG (M)
30321 F CNO ISOCYANATE FG (M)
33895 F O3P PHOSPHONIC ACID, PHOSPHONATE FG (M)
30602 F CN20 UREA FG (M)
33979 F 04S SULFATE FG (M)
33847 F O2SI O-SI-O (M)
30995 F CO3 CARBONATE FG (M)
        100231 34211/FG
         25088 33918/FG
         21402 34128/FG
             0 33962OR 33079/FG
          8144 30384/FG
          6570 30321/FG
          5338 33895/FG
          5202 30602/FG
          4726 33979/FG
          4334 33847/FG
          3862 30995/FG
          6196 L1(NOTL) (34211 OR 33918 OR 34128 OR 33962OR 33079 OR 30384
L2
                OR 30321 OR 33895 OR 30602 OR 33979 OR 33847 OR 30995)/FG
=> s (02797)/un or hypertension?
02797 HYPERTENSIVE AGENTS
          1125 (02797)/UN
          3207 HYPERTENSION?
          4230 (02797)/UN OR HYPERTENSION?
L3
=> s myocardial infarct or 03568/un
03568 NECROSIS
           853 MYOCARDIAL
           128 INFARCT
            41 MYOCARDIAL INFARCT
                  (MYOCARDIAL (W) INFARCT)
           388 03568/UN
           417 MYOCARDIAL INFARCT OR 03568/UN
T.4
=> s raynaud's?
MISMATCHED QUOTE 'RAYNAUD'S?'
Quotation marks (or apostrophes) must be used in pairs,
one before and one after the expression you are setting
off or masking.
=> s raynauds? or raynaud?
              5 RAYNAUDS?
             55 RAYNAUD?
T<sub>1</sub>5
             55 RAYNAUDS? OR RAYNAUD?
=> s 00441 or atherosclerosis
            20 00441
            660 ATHEROSCLEROSIS
```

L13 38 L11 AND L12

=> s 13 or 14 or 15 or 19

L14 5913 L3 OR L4 OR L5 OR L9

=> s 114 and 113

L15 13 L14 AND L13

```
4 L12 AND L8
L16
=> s 12 and 18
            7 L2 AND L8
L17
=> s 115 or 116 or 117
            20 L15 OR L16 OR L17
=> s 113 or 118
            44 L13 OR L18
T.19
=> s 119 not 118
            24 L19 NOT L18
=> d 118 1- bib, ab
YOU HAVE REQUESTED DATA FROM 20 ANSWERS - CONTINUE? Y/(N):y
L18 ANSWER 1 OF 20 IFICDB COPYRIGHT 1998 IFI
      2803555 IFIPAT; IFIUDB; IFICDB
AΝ
      THIENYL-, FURYL- AND PYRROLYL SULFONAMIDES AND DERIVATIVES THEREOF
TT
      THAT MODULATE THE ACTIVITY OF ENDOTHELIN; VASOCONSTRICTORS
      Balaji, Vitukudi N, Encinitas, CA
INF
      Castillo, Rosario S, San Diego, CA
      Chan, Ming F, San Diego, CA
      Kois, Adam, San Diego, CA
      Raju, Bore G, San Diego, CA
      Verner, Erik J, San Diego, CA
      Wu, Chengde, San Diego, CA
      Yalamoori, Venkatachalapathi, San Diego, CA
      Balaji Vitukudi N; Castillo Rosario S; Chan Ming F; Kois Adam; Raju
IN
      Bore G; Verner Erik J; Wu Chengde; Yalamoori Venkatachalapathi
PAF
      Texas Biotechnology Corporation, Houston, TX
      Texas Biotechnology Corp (36865)
EXNAM McKane, Joseph
      Brown, Martin, Haller & McClain
AG
      Seidman, Stephanie L
PΙ
      US 5594021 970114
      US 95-477223 950606
ΑI
      US 93-65202 930520 CONTINUATION-IN-PART ABANDONED
RLI
      US 93-100125 930730 CONTINUATION-IN-PART ABANDONED
      US 93-100565 930730 CONTINUATION-IN-PART ABANDONED
      US 93-142159 931021 CONTINUATION-IN-PART 5464853
      US 93-142552 931021 CONTINUATION-IN-PART 5514691
      US 93-142631 931021 CONTINUATION-IN-PART ABANDONED
         94-222287 940405 CONTINUATION-IN-PART
      US
      US 94-247072 940520 CONTINUATION-IN-PART
      US 95-417075 950404 CONTINUATION-IN-PART ABANDONED
         5594021 970114
      US
FΙ
      US
         5464853
      US 5514691
DT
      UTILITY
      CHEMICAL
FS
CLMN
      174
AB
      Thienyl-, furyl- and pyrrolyl-sulfonamides and methods for
```

=> s 112 and 18

modulating or altering the activity of the endothelin family of

peptides are provided. In particular, N(isoxazolyl)thienylsulfonamides, N-(isoxazolyl)furylsulfonamides and N-(isoxazolyl)pyrrolylsulfonamides and methods using these sulfonamides for inhibiting the binding of an endothelin peptide to an endothelin receptor by contacting the receptor with the sulfonamide are provided. Methods for treating endothelinmediated disorders by administering effective amounts of one or more of these sulfonamides or prodrugs thereof that inhibit or increase the activity of endothelin are also provided.

L18 ANSWER 2 OF 20 IFICDB COPYRIGHT 1998 IFI 2798691 IFIPAT; IFIUDB; IFICDB ΑN BENZENESULFONAMIDE DERIVATIVE AND PROCESS FOR PREPARING THEREOF; ΤI ENDOTHELIN ANTAGONISTS INF Kikkawa, Kohei, Kawaguchi, JP Kohno, Rikako, Omiya, JP Yamada, Koichiro, Saitama-ken, JP Yasuda, Kosuke, Saitama-ken, JP Kikkawa Kohei (JP); Kohno Rikako (JP); Yamada Koichiro (JP); Yasuda ΙN Kosuke (JP) Tanabe Seiyaku Co, Ltd, Osaka, JP PAF Tanabe Seiyaku Co Ltd JP (82733) EXNAM Grumbling, Matthew V Finnegan, Henderson, Farabow, Garrett & Dunner, LLP ΑG US 5589478 961231 PΙ US 94-356958 941216 ΑI JP 93318779 931217 PRAI JP 94140628 940623 JP 94183553 940804 US 5589478 961231 FIDTUTILITY FS CHEMICAL MFN: 0101 MRN 7261 CLMN 15 A benzenesulfonamide derivative of the formula (I): AB

DRAWING

wherein Ring A and Ring B are the same or different and each substituted or unsubstituted benzene ring, Q is a single bond or a group of the formula: -O-, -S-, -SO-, -SO2- or -CH2-, Y is a group of the formula: -O-, -S- or -NH-, Alk is lower alkylene group or lower alkenylene group, Z is a single bond or a group of the formula: -O- or -NH-, R is a substituted or unsubstituted aromatic heterocyclic or aryl group, R1 is hydrogen atom, trifluoromethyl group, substituted or unsubstituted lower alkyl group, substituted or unsubstituted lower alkenyl group, mono- or di-lower alkylamino group, substituted or unsubstituted lower alkylthio group, substituted or unsubstituted lower alkoxy group, substituted or unsubstituted lower alkynyl group, aromatic heterocyclic group, substituted or unsubstituted aliphatic heterocyclic group or aryl group, provided that when Z is a single bond, R is a substituted or unsubstituted aromatic heterocyclic group, or a pharmaceutically acceptable salt thereof, and processes for preparing the same, these compounds having endothelin antagonistic activity and being useful in the prophylaxis or treatment of various diseases caused by endothelin.

L18 ANSWER 3 OF 20 IFICDB COPYRIGHT 1998 IFI

AN 2745319 IFIPAT; IFIUDB; IFICDB

TI SULFONYLAMINOPYRIMIDINES; ENDOTHELIN RECEPTOR INHIBITORS

INF Breu, Volker, Schliengen, DE Burri, Kaspar, Binningen, CH

Cassal, Jean-Marie, Mulhouse, FR Clozel, Martine, Saint-Louis, FR Hirth, Georges, Huningue, FR Loffler, Bernd-Michael, Oberrimsingen, DE Muller, Marcel, Frenkendorf, CH Neidhart, Werner, Bartenheim, FR Ramuz, Henri, Birsfelden, CH Breu Volker (DE); Burri Kaspar (CH); Cassal Jean-Marie (FR); Clozel IN Martine (FR); Hirth Georges (FR); Loffler Bernd-Michael (DE); Muller Marcel (CH); Neidhart Werner (FR); Ramuz Henri (CH) Hoffmann-La Roche Inc, Nutley, NJ PAF Hoffmann-La Roche Inc (39424) PΑ EXNAM Ford, John M Gould, George M AG Johnston, George W Silverman, Robert A 5541186 960730 PΤ US 94-266072 940627 ΑI US PRAI CH 931924 930628 CH 941575 940520 US 5541186 960730 FΙ UTILITY; REASSIGNED DT FS CHEMICAL CLMN 23 AB A compound of the formula

DRAWING

wherein R1 to R, Ra, RbX, Y, Z, m and n have the significance given in the description, can be used as medicaments, especially for the treatment and prophylaxix of conditions which are associated with endothelin activities.

L18 ANSWER 4 OF 20 IFICDB COPYRIGHT 1998 IFI 2742872 IFIPAT; IFIUDB; IFICDB AN ENDOTHELIN ANTAGONISTS BEARING 5-MEMBERED HETEROCYCLIC AMIDES; TITREATMENT OF HYPERTENSION, CARDIOVASCULAR DISORDERS, PROSTATE HYPERPLASIA OR ANTIINFLAMMATORY AGENTS Ashton, Wallace T, Clark, NJ INF Chang, Linda L, Wayne, NJ Greenlee, William J, Teaneck, NJ Ashton Wallace T; Chang Linda L; Greenlee William J ΙN Merck & Co, Inc, Rahway, NJ PAF PΑ Merck & Co Inc (54136) EXNAM Gerstl, Robert Camara, Valerie J ΑG Daniel, Mark R US 5538991 960723 PΙ US 94-306275 940914 ΑI US 5538991 960723 FIUTILITY; REASSIGNED DT CHEMICAL FS 7957 MFN: 0913 MRN CLMN 22 Phenoxyphenylacetic acids and derivatives of the general structural AΒ

DRAWING

formula I

have endothelin antagonist activity and are useful in treating cardiovascular disorders, such as hypertension, postischemic renal failure, vasospasm, cerebral and cardiac ischemia, myocardial infarction, endotoxic shock, benign prostatic hyperplasia,

```
TI PHENYL SULFONAMIDE ENDOTHELIN ANTAGONISTS; ISOXAZOLE MOIETY ATTACHED TO N; USED TO TREAT HYPERTENSION, CELL DISORDERS AN GROWTH, ENDOTOXEMIA AND ISCHEMIA

INF Hunt, John T, Princeton, NJ
Murugesan, Natesan, Lawrenceville, NJ
Stein, Philip D, Princeton, NJ
IN Hunt John T; Murugesan Natesan; Stein Philip D
PAF Bristol-Myers Squibb Co, Princeton, NJ
PA Bristol-Myers Squibb Co (22921)

EXNAM McKane, Joseph K
AG Babajko, Suzanne E
PI US 5514696 960507 (CITED IN 001 LATER PATENTS)
AI US 93-146262 931029
RLI US 92-879000 920506 CONTINUATION-IN-PART ABANDONED
US 93-21410 930223 CONTINUATION-IN-PART ABANDONED
US 93-41583 930413 CONTINUATION-IN-PART ABANDONED
```

US 5514696 960507

FΙ

DT UTILITY
FS CHEMICAL
OS CA 125:114639
MRN 6770 MFN: 0977
CLMN 22
AB Compounds of the formula

DRAWING

inhibit the activity of endothelin. The symbols are defined as follows: R1, R2 and R3 are each independently (a) hydrogen, except that R1 is other than hydrogen; (b) alkyl, alkenyl, alkynyl, alkoxy, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenyl, cycloalkenylalkyl, aryl, aryloxy, aralkyl or aralkoxy, any of which may be substituted with Z1, Z2 and Z3; (c) halo; (d) hydroxyl; (e) cyano; (f) nitro; (g) -C(O)H or -C(O)R6; (h) -CO2H or -CO2R6; (i) -SH, -S(O)nR6, -S(O)m-OH, -S(O)m-OR6, -O-S(O)m-R6, -OS(O)mOH or -O-S(O)m-OR6; (j) -Z4-NR7R8; or (k) -Z4-N(R11-Z5-NR9R10; and the remaining symbols are as defined in the specification.

L18 ANSWER 7 OF 20 IFICDB COPYRIGHT 1998 IFI AN 2589324 IFIPAT; IFIUDB; IFICDB ΤI QUINAZOLINONES SUBSTITUTED WITH PHENOXYPHENYLACETIC ACID DERIVATIVES; CARDIOVASCULAR DISORDERS OR HYPOTENSIVE AGENTS INF Bagley, Scott W, Rahway, NJ Chakravarty, Prasun K, Edison, NJ Chen, Anna, Rahway, NJ Dhanoa, Daljit S, Tinton Falls, NJ Fitch, Kenneth J, Cranford, NJ Greenlee, William J, Teaneck, NJ Naylor, Elizabeth M, Scotch Plains, NJ Tata, James R, Westfield, NJ Walsh, Thomas F, Westfield, NJ Williams, Jr, David L, Telford, PA Bagley Scott W; Chakravarty Prasun K; Chen Anna; Dhanoa Daljit S; IN Fitch Kenneth J; Greenlee William J; Naylor Elizabeth M; Tata James R; Walsh Thomas F; Williams David L Jr Merck & Co, Inc, Rahway, NJ PAF Merck & Co Inc (54136) EXNAM Ford, John M Camara, Valerie J Daniel, Mark R DiPrima, Joseph F PΙ US 5401745 950328 (CITED IN 001 LATER PATENTS) US 93-33595 930319 ΑI US 5401745 950328 FIDT UTILITY FS CHEMICAL 7238 MFN: 0283 MRN CLMN 10 AB Phenoxyphenylacetic acids and derivatives of general structural formula I

DRAWING

have endothelin antagonist activity and are therefore useful in treating cardiovascular disorders, such as hypertension, postischemic renal failure, vasospasm, cerebal and cardiac ischemia, myocardial infarction, inflammatory diseases, Raynaud's disease, and endotoxic shock, and asthma.

L18 ANSWER 8 OF 20 IFICDB COPYRIGHT 1998 IFI AN 2451969 IFIPAT; IFIUDB; IFICDB

```
ΤI
      SULFONAMIDES
      Burri, Kaspar, Binningen, CH
INF
      Clozel, Martine, St Louis, FR
      Fischli, Walter, Allschwil, CH
      Hirth, Georges, Huningue, FR
      Loffler, Bernd-Michael, Oberrimsingen, DE
     Neidhart, Werner, Bartenheim, FR
      Ramuz, Henri, Birsfelden, CH
      Burri Kaspar (CH); Clozel Martine (FR); Fischli Walter (CH); Hirth
IN
      Georges (FR); Loffler Bernd-Michael (DE); Neidhart Werner (FR);
      Ramuz Henri (CH)
PAF
      Hoffmann-La Roche Inc, Nutley, NJ
      Hoffmann-La Roche Inc (39424)
PΑ
EXNAM Ford, John M
      Coletti, Ellen Ciambrone
AG
      Gould, George M
      Johnston, George W
ΡI
         5292740 940308
                           (CITED IN 007 LATER PATENTS)
      US
     US 92-896015 920609
ΑI
     CH 91-1760 911760 910613
PRAI
      CH 92-1516 921516 920512
     US 5292740 940308
FΙ
     UTILITY
דת
FS
      CHEMICAL
      6255
            MFN: 0768
MRN
      6319
                  0716
                  0159
      6676
      6676
                  0163
CLMN
     33
      The novel sulfonamides of formula I,
AB
                             DRAWING
       in which the symbols R1-R9, Ra, Rb, X, Y and n have the
      significance given in the description and salts thereof can be used
```

for the treatment of circulatory disorders, especially hypertension, ischemia, vasopasms and angina pectoris.

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L18 ANSWER 9 OF 20 IFICDB COPYRIGHT 1998 IFI
ΑN
      2426627 IFIPAT; IFIUDB; IFICDB
      SULFONAMIDES AND USES; TREATMENT OF CIRCULATORY DISORDERS
TI
      Burri, Kaspar, Binningen, CH
INF
      Clozel, Martine, St Louis, FR
      Fischli, Walter, Allschwil, CH
      Hirth, Georges, Huningue, FR
      Loffler, Bernd M, Oberrimsingen, DE
      Ramuz, Henri, Birsfelden, CH
Burri Kaspar (CH); Clozel Martine (FR); Fischli Walter (CH); Hirth
IN
      Georges (FR); Loffler Bernd M (DE); Ramuz Henri (CH)
      Hoffmann-La Roche Inc, Nutley, NJ
PAF
      Hoffmann-La Roche Inc (39424)
EXNAM Ford, John M
      Gould, George M
AG
      Johnston, George W
      Krovatin, William
PΙ
      US
         5270313 931214 (CITED IN 010 LATER PATENTS)
      US
          92-869274 920415
ΑI
PRAI
     CH
         91-1242 911242 910425
         92-343 92343 920206
      CH
      US 5270313 931214
FI
      UTILITY
DT
FS
      CHEMICAL
MRN
      6164 MFN: 0038
```

6164 0041

CLMN 25

AB Sulfonamides of formula I, in which the symbols R1-R6, X, Y and n have the significance given in the description and which are in part novel compounds, and salts thereof, which can be used as active ingredients for the manufacture of medicaments for the treatment of circulatory disorders, especially hypertension, ischemia, vasospasms and angina pectoris, are described.

L18 ANSWER 10 OF 20 IFICDB COPYRIGHT 1998 IFI

AN 2417750 IFIPAT; IFIUDB; IFICDB

TI AMINOPYRIDINE COMPOUNDS; FOR TREATING DISEASES OF THE CIRCULATORY SYSTEM

INF Eda, Masahiro, Osaka, JP
Eiraku, Miyuki, Osaka, JP
Fukaya, Chikara, Osaka, JP
Goda, Maki, Osaka, JP
Hihara, Mitsuyoshi, Osaka, JP
Matzno, Sumio, Osaka, JP
Nakamura, Norifumi, Osaka, JP
Okada, Takehiro, Osaka, JP
Sakashita, Hiroshi, Osaka, JP
Sugiura, Masanori, Osaka, JP
Takemoto, Tadahiro, Osaka, JP
Uchida, Yasumi, Chiba, JP

IN Eda Masahiro (JP); Eiraku Miyuki (JP); Fukaya Chikara (JP); Goda
Maki (JP); Hihara Mitsuyoshi (JP); Matzno Sumio (JP); Nakamura
Norifumi (JP); Okada Takehiro (JP); Sakashita Hiroshi (JP); Sugiura
Masanori (JP); Takemoto Tadahiro (JP); Uchida Yasumi (JP)

PAF The Green Cross Corporation, Osaka, JP

PA Green Cross Corp The JP (35916)

EXNAM Tsang, Cecilia

AG Sughrue, Mion, Zinn, Macpeak & Seas

PI US 5262415 931116

AI US 92-850817 920313

PRAI JP 91-76777 9176777 910315

FI US 5262415 931116

DT UTILITY

FS CHEMICAL

MRN 6084 MFN: 0507 6084 0509

CLMN 20

AB An aminopyridine compound represented by the formula:

DRAWING

wherein n represents 0 or 1; Z represents =S, =O, =NCN or =CHNO2; R1 represents -CN, -NR3R4, -CONR3R4, -NHR3R4, -NHCONHR3, -NHSO2R3 or -SR3; R2 represents H, or substituted or unsubstituted alkyl; R3 and R4, which may be the same or different, represent H, substituted or unsubstituted alkyl, aryl, substituted or unsubstituted acyl or alkoxycarbonyl group; and R3 and R4 may form a heterocyclic ring together with a nitrogen atom to which R3 and R4 are bound, through another heteroatom or without it; or an acid salt thereof, which is excellent in pharmacological effect and repressed in side effects as a drug for circulatory diseases.

L18 ANSWER 11 OF 20 IFICDB COPYRIGHT 1998 IFI

AN 2374027 IFIPAT; IFIUDB; IFICDB

TI XANTHINE COMPOUNDS AND COMPOSITIONS, AND METHODS OF USING THEM; PHOSPHODIESTERASE INHIBITORS, ANTIINFLAMMATORY AGENTS, ANTIALLERGENS

INF Gristwood, Robert W, Barcelona, ES

Mauri, Jacinto M, Barcelona, ES Noverola, Armando V, Barcelona, ES Soto, Jose M P, Barcelona, ES Gristwood Robert W (ES); Mauri Jacinto M (ES); Noverola Armando V ΙN (ES); Soto Jose M P (ES) PAF Laboratorios Almirall SA, Barcelona, ES Laboratorios Almirall S A ES (31177) PA EXNAM Rizzo, Nicholas S Spencer, Frank & Schneider AG US 5223504 930629 (CITED IN 001 LATER PATENTS) PΙ WO 9109859 910711

ΑI US 91-743388 910816 WO 90-GB2027 901227

910816 PCT 371 date 910816 PCT 102(e) date

PRAI GB 8929208 891227 US 5223504 930629 FΙ DTUTILITY

CHEMICAL FS

MFN: 0414 5912 MRN

CLMN

PCT No. PCT/GB90/02027 Sec. 371 Date Aug. 16, 1991 Sec. 102(e) Date AB Aug. 16, 1991 PCT Filed Dec. 27, 1990 PCT Pub. No. WO91/09859 PCT Pub. Date Jul. 11, 1991. Xanthines of the general formula:

DRAWING

wherein R1 represents a straight or branched chain alkyl, alkenyl or alkynyl group of 3-6 carbon atoms, and R2 and R3, which may be the same or different, each represent hydrogen or halogen or a methyl, methoxy, nitro or trifluoromethyl group or R2 and R3 together form a methylenedioxy or ethylenedioxy group; with the proviso that R2 and R3 are not both hydrogen; and pharmacologically acceptable salts thereof with an alkali metal base or a nitrogen base containing organic base, are bronchodilators making them of value in treating asthma and vasodilators making them of interest in treating angina, hypertension, congestive heart failure and multi-infarct dementia. The compounds are also of use in combatting other conditions where inhibition of PDE type IV is thought to be beneficial. The compounds can be prepared by treating and corresponding 6-amino uracil with sodium nitrite and formic acid in an excess of formamide and adding sodium dithionate to reduce the resulting 6-amino-5-nitroso compound to give the 5,6-diamino compound that ring closes with the excess of formamide.

L18 ANSWER 12 OF 20 IFICDB COPYRIGHT 1998 IFI

ΑN 2109730 IFIPAT; IFIUDB; IFICDB

PHARMACEUTICAL FORMULATIONS FOR PARENTERAL USE; DECREASING TI PRECIPITATION AT INJECTION SITE OR IN LUNGS OR OTHER ORGANS BY COMBINING WITH HYDROXYPROPYL-BETA-CYCLODEXTRIN

Bodor, Nicholas S, Gainesville, FL INF

IN Bodor Nicholas S

PAF University of Florida, Gainesville, FL

PΑ Florida, University of (31139)

EXNAM Griffin, Ronald W

Baumeister, Mary Katherine AG

Clarke, Dennis P

PΙ 4983586 910108 (CITED IN 018 LATER PATENTS)

ΑI

88-174945 880329 87-139755 871230 CONTINUATION-IN-PART RLI US

US 4983586 910108 FI

UTILITY DT

FS CHEMICAL MRN 5016 MFN: 0341

CLMN 41

GI 2 Drawing Sheet; 3 Figures;

AB Aqueous parenteral solutions of drugs which are insoluble or only sparingly soluble in water and/or which are unstable in water, combined with hydroxypropyl- Beta -cyclodextrin, provide a means for alleviating problems associated with drug precipitation at the injection site and/or in the lungs or other organs following parenteral administration.

L18 ANSWER 13 OF 20 IFICDB COPYRIGHT 1998 IFI

AN 2039662 IFIPAT; IFIUDB; IFICDB

TI N-SUBSTITUTED 3,4-DIHYDROPYRIMIDINE COMPOUNDS AS AGENTS FOR TREATING DISORDERS OF CARDIOVASCULAR SYSTEM; HYPOTENSIVE AND CARDIOTONIC AGENTS; VASODILATION

INF Cho, Hidetsura, Osaka, JP
 Ueda, Masaru, Saitama, JP

IN Cho Hidetsura (JP); Ueda Masaru (JP)

PAF Suntory Limited, Osaka, JP

PA Suntory Ltd JP (81755)

EXNAM Ford, John M

EXNAM Whittenbaugh, Robert C

AG Cushman, Darby & Cushman

PI US 4920124 900424

AI US 88-157777 880219

PRAI JP 87-38345 8738345 870221

FI US 4920124 900424

DT UTILITY FS CHEMICAL

MRN 4858 MFN: 0206

CLMN 5

GI 1 Drawing Sheet; 1 Figures;

AB N-substituted 3,4-dihydropyrimidine compounds of the formula:

DRAWING

wherein R is straight, branched, cyclic or cyclo-straight alkyl having from one to four carbon atoms; and X1, X2 and X3 are the same or different and are hydrogen, halogen, lower alkyl having from one to four carbon atoms, lower alkoxy having from one to four carbon atoms, nitro, trifluoromethyl, hydroxy, or tbutyldimethylsilyloxy with the proviso that the case wherein X1, X2 and X3 are all hydrogen is not applicable have substantially strong and lasting vasodilative effects. Therefore, the compounds are useful as agents for treating disorders of the cardiovascular system, for example, antihypertensive agents, circulation improver and antianginal agents.

L18 ANSWER 14 OF 20 IFICDB COPYRIGHT 1998 IFI

AN 2013482 IFIPAT; IFIUDB; IFICDB

TI PHARMACEUTICALLY USEFUL DIHYDROPYRIDINYLDICARBOXYLATE AMIDES AND ESTERS INCORPORATING ARYLPIPERAZINYLALKYL MOIETIES; CARDIOVASCULAR DISORDERS

INF Poindexter, Graham S, Evansville, IN
Temple, Jr, Davis L, Evansville, IN

IN Poindexter Graham S; Temple Davis L Jr

PAF Bristol-Myers Company, New York, NY

PA Bristol-Myers Co (11376)

EXNAM Hollrah, Glennon H

EXNAM Turnipseed, James H

AG Ryan, Richard P Uloth, Robert H

PI US 4895846 900123 (CITED IN 004 LATER PATENTS)

AB A series of 1,4-dihydropyridin-3,5-yl dicarboxylic acid amides and esters incorporating an arylpiperazinylalkyl moiety have been prepared possessing the general formula

DRAWING

wherein R4 is cycloalkyl, aryl or hetaryl, generally with electron-withdrawing substituents; R2 and R6 are lower alkyl, alkanol, alkoxyalkyl, or alkylaminoalkyl; R5 is R2 or arylpiperazinylalkyl; X is O or NH; Y is lower alkylene, alkoxyalkylene, alkylaminoalkylene; and Z is phenyl, substituted pheny, pyridinyl, substituted pyridinyl, or pyrimidinyl. Compounds of this series demonstrate activity as calcium and alpha-adrenergic blockers in in vitro testing and antihypertensive, anti-ischemic, and platelet function inhibiting actions in in vivo screens.

```
ANSWER 15 OF 20 IFICDB COPYRIGHT 1998 IFI
      1865059 IFIPAT; IFIUDB; IFICDB
NΑ
ΤI
      1,4-DIHYDROPYRIDINE DERIVATIVES, AND PHARMACEUTICAL COMPOSITIONS
      CONTAINING SAME, USEFUL FOR TREATING CARDIOVASCULAR DISEASES
     Hagihara, Koichiro, Itami, JP
INF
     Koyama, Hiroyasu, Ageo, JP
      Suzuki, Yoshikuni, Ohmiya, JP
     HAGIHARA KOICHIRO (JP); KOYAMA HIROYASU (JP); SUZUKI YOSHIKUNI (JP)
IN
PAF
     Nisshin Flour Milling Co, Ltd, Tokyo, JP
     NISSHIN FLOUR MILLING CO LTD JP (60029)
EXNAM Rotman, Alan L
      Cushman, Darby & Cushman
      US 4757071 880712 (CITED IN 001 LATER PATENTS)
ΡI
     US 85-806454 851209
ΑI
     JP 84-262942 84262942 841214
PRAI
      JP 85-233349 85233349 851021
      JP 85-233350 85233350 851021
      JP 85-269302 85269302 851202
     US 4757071 880712
FI
     UTILITY
DТ
     CHEMICAL
FS
      4513 MFN: 0643
MRN
CLMN
      2,6-Dimethyl-4-(2- or 3-substituted phenyl)-1,4-dihydropyridine3,5-
AB
      dicarboxylic acid diesters, having vasodilating and blood pressure
      lowering effects, in the ester moiety at the 3-position of which a
      heterocyclic group is linked to an alkylene group through an ester
      bond (carbonyloxy group). The diesters are used for treatment of
```

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L18 ANSWER 16 OF 20 IFICDB COPYRIGHT 1998 IFI
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AN 1863381 IFIPAT; IFIUDB; IFICDB

TI PHARMACEUTICALLY USEFUL DIHYDROPYRIDINYLDICARBOXYLATE AMIDES AND ESTERS INCORPORATING ARYLPIPERAZINYLALKYL MOITIES

cardiac diseases, cerebrovascular diseases and hypertension

INF Poindexter, Graham, Evansville, IN
Temple, Jr, Davis L, Evansville, IN

IN POINDEXTER GRAHAM; TEMPLE DAVIS L JR

PAF Bristol-Myers Company, New York, NY

```
EXNAM Hollrah, Glennon H
  EXNAM Turnipseed, James H
        Uloth, Robert H
           4755512 880705 (CITED IN 002 LATER PATENTS)
        US
  PΙ
        US 85-693426 850122
  ΑI
        US 84-599097 840411 CONTINUATION-IN-PART ABANDONED
  RLI
        US 4755512 880705
  FΙ
        UTILITY; EXPIRED
  DT
        CHEMICAL
  FS
        4368
               MFN: 0834
  MRN
  CLMN 9
        A series of 1,4-dihydropyridin-3,5-yl dicarboxylic acid amides and
  AB
        esters incorporating an arylpiperazinylalkyl moiety have been
        prepared possessing the general formula
             2-R2, 3-((4-Z-PIPERAZIN-1-YL)-Y-X-CO-), 4-R4, 5-(R5-OOC-),
             6-R6-1, 4-DIHYDROPYRIDINE
         wherein R4 is cycloalkyl, aryl or hetaryl, generally with
        electronwithdrawing substituents; R2 and R6 are lower alkyl,
        alkanol, alkoxyalkyl, or alkylaminoalkyl; R5 is R2 or
        arylpiperazinylalkyl; X is 0 or NH; Y is lower alkylene,
        alkoxyalkylene, alkylaminoalkylene; and Z is phenyl, substituted
        phenyl, pyridinyl, substituted pyridinyl, or pyrimidinyl. Compounds
        of this series demonstrate activity as calcium and alphaadrenergic
        blockers in in vitro testing and antihypertensive, antiischemic,
        and platelet function inhibiting actions in in vivo screens.
  L18 ANSWER 17 OF 20 IFICDB COPYRIGHT 1998 IFI
        1619809 IFIPAT; IFIUDB; IFICDB
        DIHYDROPYRIDINE DERIVATIVES AND THEIR USE IN TREATING HEART
        CONDITIONS AND HYPERTENSION; VASODILATORS
        Campbell, Simon F, Deal, GB
  INF
        Cross, Peter E, Canterbury, GB Stubbs, John K, Deal, GB
        CAMPBELL SIMON F (GB); CROSS PETER E (GB); STUBBS JOHN K (GB)
  IN
  PAF
        Pfizer Inc, New York, NY
        PFIZER INC (65376)
  EXNAM Raymond, Richard L
  EXNAM Turnipseed, James H
        Frost, Albert E
        Knuth, Charles J
        McManus, James M
        US 4539322 850903 (CITED IN 003 LATER PATENTS)
  PΙ
        US 83-528507 830901
US 83-463092 830202 CONTINUATION-IN-PART ABANDONED
  ΑI
  RLI
  PRAI GB 8225246 820904
        EP 83-304954 83304954.7 830826
US 4539322 850903
  FΙ
        UTILITY
  DТ
        CHEMICAL
  FS
  MRN
        4177
              MFN: 0643
  CLMN 20
        1,4-Dihydropyridine derivatives of the formula:
             2-(CH3-),3-(R1-OOC-),4-R,5-(R2-OOC-),6-((4-R3-
             PIPERAZIN-1-YL)-Y-O-CH2-)-1,4-DIHYDROPYRIDINE
         and their pharmaceutically acceptable acid addition salts; where R
        is aryl or heteroaryl; R1 and R2 are each independently C1-C4 alkyl
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BRISTOL-MYERS CO (11376)

or 2-methoxyethyl; Y is -(CH2)2-, -(CH2)3-, -CH2CH(CH3)- or -CH2C(CH3)2-; R3 is hydrogen or an organic substituent are useful

```
ANSWER 18 OF 20 IFICDB COPYRIGHT 1998 IFI
L18
      1038790 IFIPAT; IFIUDB; IFICDB
AΝ
      BICYCLIC DERIVATIVES OF 1,4-DIHYDROPYRIDINE 3,5-DICARBOXYLIC ACID
TI
      ESTERS; HYPOTENSIVE, CORONARY DILATORS
      Bossert, Friedrich, Wuppertal-Elberfeld, DE
INF
     Meyer, Horst, Wuppertal, DE
      Stoepel, Kurt, Wuppertal-Vohwinkel, DE
      Vater, Wulf, Opladen, DE
      BOSSERT FRIEDRICH; MEYER HORST; STOEPEL KURT; VATER WULF
ΙN
PAF
      Bayer Aktiengesellschaft, DE
      BAYER AG DE (29448)
EXNAM Waddell, Frederick E
         3988458 761026 (CITED IN 001 LATER PATENTS)
PΙ
         74-532458 741213
ΑI
      US
      US 73-336483 730228 DIVISION 3855231
RLI
      US 74-454996 740327 DIVISION 3950336
     DE 72-2210633 720306
PRAI
      US 3988458 761026
FI
      US 3855231
      US 3950336
      DE 2210633
      FR 2181794
      GB 1384504
DT
      UTILITY
FS
      CHEMICAL
os
      CA 87:5816
CLMN
      2,6-Diamino-1,4-dihydropyridines bearing carbonyl functions in the
AB
      3- and 5-positions and being substituted in the 4-position by lower
      alkyl, phenyl, substituted phenyl or a heterocyclic group are
      antihypertensive agents and coronary vessel dilators. The
      compounds, of which 2,6-diamino-4-(3-nitrophenyl)-
      1,4dihydropyridine-3,5-dicarboxylic acid 3,5-diethyl ester is a
      representative embodiment, are prepared through condensation of an
      amidine with either an aldehyde or an ylidenecyanoacetoacetic acid
      ester.
L18 ANSWER 19 OF 20 IFICDB COPYRIGHT 1998 IFI
ΑN
      1024507 IFIPAT; IFIUDB; IFICDB
      1,4-DIHYDROPYRIDINE CARBOXYLIC ACID ESTERS USEFUL AS CORONARY
TΙ
      VESSEL DILATORS AND ANTI-HYPERTENSIVES
      Bossert, Friedrich, Wuppertal, DE
INF
      Meyer, Horst, Wuppertal, DE
      Vater, Wulf, Opladen, DE
      BOSSERT FRIEDRICH; MEYER HORST; VATER WULF
IN
      Bayer Aktiengesellschaft, DE
PAF
      BAYER AG DE (29448)
PΑ
EXNAM Schenkman, Leonard
PΙ
      US 3974275 760810 (CITED IN 006 LATER PATENTS)
ΑI
      US
          75-548395 750210
      US
          73-350381 730412 DIVISION 3905970
RLI
PRAI DE 72-2218644 720418
                  760810
      US 3974275
FΙ
      US 3905970
      DE 2218644
      FR 2182983
      GB 1383625
      UTILITY
DT
      CHEMICAL
FS
```

CA 80:14958

OS

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pharmaceutically acceptable non toxic salts are useful as coronary
      vessel dilators and antihypertensives.
L18 ANSWER 20 OF 20 IFICDB COPYRIGHT 1998 IFI
      0960860 IFIPAT; IFIUDB; IFICDB
AΝ
ΤI
      PHARMACEUTICAL COMPOSITION UTILIZING 2-AMINO-1,4-DIHYDROPYRIDINE
      DERIVATIVES AND METHOD OF EFFECTING CORONARY VESSEL DILATION AND
      TREATING HYPERTENSION IN HUMANS AND ANIMALS
INF
      Bossert, Friedrich, Wuppertal-Elberfeld, DE
     Meyer, Horst, Wuppertal-Elberfeld, DE
      Stoepel, Kurt, Wuppertal-Elberfeld, DE
      Vater, Wulf, Opladen, DE
      BOSSERT FRIEDRICH; MEYER HORST; STOEPEL KURT; VATER WULF
IN
PAF
      Bayer Aktiengesellschaft, DE
PΑ
      BAYER AG DE (29448)
EXNAM Meyers, Albert T
EXNAM Stephens, Daren M
         3911123 751007 (CITED IN 001 LATER PATENTS)
ΡI
      US
         74-439305 740204
ΑI
      US
RLI
     US 73-336639 730228 DIVISION
PRAI DE
         73-2210674 730414
FΙ
     US 3911123 751007
     DE 2210674
      FR 2183675
      GB 1369401
DT
     UTILITY
      CHEMICAL
FS
      CA 80:3397
os
     176
CLMN
      2-Amino-1,4-dihydropyridines bearing a carbonyl function in the
AB
      5-position and being optionally substituted by lower alkyl or
      phenyl in the 6-position, and the corresponding
      2-amino1,4,5,6,7,8-hexahydro-5-oxoquinolines, which derivatives are
      further substituted by a carbonyl group in the 3-position and
      optionally substituted in the 4-position by lower alkyl, phenyl,
      substituted phenyl or a heterocylic group are antihypertensive
      agents and coronary vessel dilators. The compounds, of which
      2amino-6-methyl-4-(3-nitrophenyl)-1,4-dihydropyridine-
      3,5dicarboxylic acid 3,5-diethyl ester is a representative
      embodiment, are prepared through condensation of an
      ylideneacetoacetic acid ester and an amidine.
=> d his
     (FILE 'HOME' ENTERED AT 13:47:52 ON 06 JAN 1998)
     FILE 'IFICDB' ENTERED AT 13:48:06 ON 06 JAN 1998
           9026 S ((34553 OR 34615)(L)(33696 OR 33697 OR 33698 OR 33700 O
L1
L2
           6196 S L1(NOTL) (34211 OR 33918 OR 34128 OR 33962OR 33079 OR 30
L3
           4230 S (02797)/UN OR HYPERTENSION?
L4
            417 S MYOCARDIAL INFARCT OR 03568/UN
L5
             55 S RAYNAUDS? OR RAYNAUD?
            680 S 00441 OR ATHEROSCLEROSIS
L6
              0 S 08423
L7
L8
            381 S 08423/UN
           1408 S 00441/UN OR L6
L9
L10
          2938 S 05859/UN OR 05860/UN
           8483 S 514241000-514276000/NCLR
L11
```

Certain 1,4-dihydropyridine carboxylic acid esters or their

CLMN AB

L12

L13

104 S L2 AND L10

38 S L11 AND L12

```
5913 S L3 OR L4 OR L5 OR L9
, L15
               13 S L14 AND L13
                4 S L12 AND L8
  L16
  L17
                7 S L2 AND L8
               20 S L15 OR L16 OR L17
  L18
  L19
               44 S L13 OR L18
               24 S L19 NOT L18
  L20
  => d 120 1- bib, ab
  YOU HAVE REQUESTED DATA FROM 24 ANSWERS - CONTINUE? Y/(N):y
  L20 ANSWER 1 OF 24 IFICDB COPYRIGHT 1998 IFI
        2350613 IFIPAT; IFIUDB; IFICDB
  ΑN
        2-THIO OR OXO-4-ARYL OR HETEROCYCLO-1,5(2H)-PYRIMIDINEDICARBOXYLIC
        ACID DIESTERS AND 3-ACYL-5-PYRIMIDINECARBOXYLIC ACIDS AND ESTERS;
        HYPOTENSIVE AND CARDIOVASCULAR AGENT, REDUCES BLOOD PRESSURE IN
        Atwal, Karnail, Cranbury
  INF
        Kimball, Spencer D, East Windsor, NJ
        Rovnyak, George C, Hopewell
        Atwal Karnail; Kimball Spencer D; Rovnyak George C
  TN
        E R Squibb & Sons, Inc, Princeton, NJ
        Squibb, E R & Sons Inc (79248)
  EXNAM Richter, Johann
        Davis, Stephen B
  AG
        US 5202330 930413
  ΡI
        US 87-618 870105
  ΑI
  RLI
        US
           85-740800 850603 CONTINUATION-IN-PART ABANDONED
           86-864687 860519 CONTINUATION-IN-PART ABANDONED
        US
        US 5202330 930413
  FI
  DΤ
        UTILITY
  FS
        CHEMICAL
  CLMN 30
        Pyrimidine compounds of the formula
  ΑB
                               DRAWING
         wherein X is sulfur or oxygen, Y is R11 or -O-R1, and R4 is aryl
        or heterocyclo are disclosed. These compounds are useful as
        cardiovascular agents, particularly anti-hypertensive agents, due
        to their calcium entry blocking vasodilator activity.
  L20 ANSWER 2 OF 24 IFICDB COPYRIGHT 1998 IFI
        2157143 IFIPAT; IFIUDB; IFICDB
  ΑN
  TI
        4-AMINO QUINOLINES AND NAPHTHYRIDINES AND THEIR USE AS MEDICINES;
        PREVENTION AND TREATMENT OF CARDIOVASCULAR DISORDERS AND INFECTIONS
        STATES; ANXIOLYTIC AND ANTI-ALLERGIC AGENTS
        Bachy, Andre , Toulouse, FR
  INF
        Keane, Peter E, Garonne, FR
        Mendes, Etienne, Toulouse, FR
        Vernieres, Jean-Claude, Muret, FR
  IN
        Bachy Andre (FR); Keane Peter E (FR); Mendes Etienne (FR);
        Vernieres Jean-Claude (FR)
  PAF
        Sanofi, Paris, FR
        Sanofi FR (7606)
  PA
  EXNAM Dentz, Bernard I
  AG
        Wegner, Cantor, Mueller & Player
  PΙ
        US 5026711 910625 (CITED IN 001 LATER PATENTS)
```

jones

US 89-362105 890606

PRAI FR 88-8807498 88 07498 880606

FR 88-8808075 88 08075 880615

ΑI

FI US 5026711 910625 DT UTILITY; REASSIGNED

FS CHEMICAL

MRN 5150 MFN: 0200

CLMN 20

AB Compounds represented by the general formula:

DRAWING

in which R1 and R2 are selected from hydrogen, C1-C6 alkyl or C2-C6 alkenyl , phenyl or benzyl or R1 and R2 form together with the nitrogen atom to which they are attached a C4-C8 saturated heterocycle, R3 is selected from hydrogen, C1-C6 alkyl, phenyl or C7-C9 phenyl-alkyl, R4 is selected from hydrogen or C1-C4 alkyl, R5 and R6 are selected from hydrogen or halogen, C1-C3 or alkoxy, nitro or trifluoromethyl; Z is selected from OH, C1-C6 alkoxy, C1-C4 alkyl, benzyl, C4-C6 aryl with or without a heteroatom, or NR8R9, R8 and R9 being selected from hydrogen, C1-C4 alkyl, phenyl or benzyl; R10 is selected from hydrogen, C1-C4 alkyl or phenyl; n is 0, 1 or 3, p is 0 or 1 and one of the symbols A, B, C, D represents N and the others CH or A, B, C, D all represent CH and their acid addition salts, and their salts with bases. The compounds are useful in the prevention and treatment of cardiovascular diseases, as anti-allergic drugs, in the prevention and treatment of infectious states, and for the treatment of anxiety.

L20 ANSWER 3 OF 24 IFICDB COPYRIGHT 1998 IFI

AN 2106105 IFIPAT; IFIUDB; IFICDB

TI 1-(AMINOPHENYL)-2-AMINOPROPANONE DERIVATIVES; ANTIDEPRESSANTS, VASODILATION, IMMUNOSTIMULANTS

INF Lafon, Louis, Paris, FR

IN Lafon Louis (FR)

PAF Laboratoire L Lafon, Masion Alfort, FR

PA Laboratoire l'Lafon S A FR (47787)

EXNAM Hollrah, Glennon H

EXNAM Rand, Scott C

AG Wegner, Cantor, Mueller & Player

PI US 4980377 901225 (CITED IN 004 LATER PATENTS)

AI US 88-270627 881114

RLI US 85-765218 850813 CONTINUATION-IN-PART ABANDONED

PRAI FR 84-8412962 85401624.3 840820 EP 85-401624 85401624.3 850809

FI US 4980377 901225

DT UTILITY

FS CHEMICAL

OS CA 115:49099

MRN 4972 MFN: 0721

CLMN 7

AB The present invention relates to the preparation of new 1(aminophenyl)-2-aminopropanone derivatives of the general formula:

DRAWING

in which X is NH2, Y is H or a halogen atom, Z is H or a halogen atom, R1 is C1-C4 alkyl or C3-C6 cycloalkyl and R2 is H or C1-C4 alkyl, or R1 and R2, taken together, can form, with the nitrogen atom to which they are bonded, a heterocyclic group selected from the group consisting of the pyrrolidino, morpholino, thiomorpholino, piperidino, hexamethyleneimino, piperazino, 4methyl-piperazino, 4-(Beta -hydroxyethyl)piperzaino, 4phenylpiperazino and 4-(p-chlorophenyl)piperazino groups, and addition salts thereof. These new derivatives are useful as

corresponding acetylated products. L20 ANSWER 4 OF 24 IFICDB COPYRIGHT 1998 IFI AN 2087299 IFIPAT; IFIUDB; IFICDB ((((3-PYRIDINYL)METHYLEN)AMINO)OXY)ALKANOIC ACIDS AND ESTERS; ΤI INHIBIT BIOSYNTHESIS OF THROMBOXANE A2 INF Freyne, Eddy J E, Rumst, BE Raeymaekers, Alfons H M, Beerse, BE Sipido, Victor, Merksem, BE Venet, Marc G, Paris, FR IN Freyne Eddy J E (BE); Raeymaekers Alfons H M (BE); Sipido Victor (BE); Venet Marc G (FR) PAF Janssen Pharmaceutica NV, Beerse, BE PA Janssen Pharmaceutica N V BE (43736) EXNAM Fan, Jane T AG Metz, Charles J PΙ US 4963573 901016 ΑI US 89-356592 890523 US 86-888670 860723 CONTINUATION ABANDONED RLI 4746671 US 88-156513 880216 CONTINUATION ABANDONED 4746671 US 85-794999 851104 CONTINUATION-IN-PART ABANDONED FI US 4963573 901016 US 4746671 US 4746671 DT UTILITY CHEMICAL FS CLMN 36 ΑB Novel ((((3-pyridinyl)methylen)amino)oxy)alkanoic acids and esters, compositions containing the same, and methods of treating clinical conditions related with the production of thromboxane A2, prostacyclin and/or prostaglandins D2, E2 and F2 Alpha . L20 ANSWER 5 OF 24 IFICDB COPYRIGHT 1998 IFI AN 2085644 IFIPAT; IFIUDB; IFICDB ΤI PYRIDAZINONE DERIVATIVES; CARDIAC STIMULANTS INF Coates, William J, Welwyn Garden City, GB Emmett, John C, Welwyn, GB ΙN Coates William J (GB); Emmett John C (GB) Smith Kline & French Laboratories Limited, Welwyn Garden City, GB PAF Smith Kline & French Laboratories Ltd GB (356) PA EXNAM Rizzo, Nicholas S King, William T Lentz, Edward T Suter, Stuart R US 4962110 901009 (CITED IN 001 LATER PATENTS) PΙ ΑI US 89-392687 890810 RLI US 86-837975 860310 CONTINUATION ABANDONED FI US 4962110 901009 DTUTILITY; EXPIRED FS CHEMICAL os CA 114:185531 CLMN 21 AB The invention relates to 2-aminopyrimidinone derivatives that have utility as cardiac stimulants. A compound of the invention is 6-(4-(1,4-dihydro-4-oxo-2-pyrimidinylamino)phenyl)-5-methyl-4, 5-dihydro-3(2H)-pyridazinone. L20 ANSWER 6 OF 24 IFICDB COPYRIGHT 1998 IFI ΑN 1969800 IFIPAT; IFIUDB; IFICDB ΤI 1,2,3,4-TETRAHYDRO-6-SUBSTITUTED-4-ARYL (OR HETEROCYCLO)-3-((SUBSTITUTED AMINO)CARBONYL)-2-THIOXO (OR OXO)-5-PYRIMIDINECARBOXYLIC ACIDS AND ESTERS

pharmaceuticals. They are obtained by deacetylation of the

INF Atwal, Karnail, Cranbury, NJ Rovnyak, George C, Hopewell, NJ IN ATWAL KARNAIL; ROVNYAK GEORGE C PAF E R Squibb & Sons, Inc, Princeton, NJ SQUIBB, E R & SONS INC (79248) PA EXNAM Ford, John M AG Gaul, Timothy J PΙ US 4855301 890808 (CITED IN 005 LATER PATENTS) ΑI US 87-8037 870209 RLI US 86-839767 860314 CONTINUATION-IN-PART ABANDONED US 86-917349 861009 CONTINUATION-IN-PART ABANDONED FI US 4855301 890808 DT UTILITY FS CHEMICAL MRN 5106 MFN: 0266 CLMN 26 AB Cardiovascular activity is exhibited by compounds having the

formula

2-(X=), 3-(R-N(-R1)-CO-), 4-R4, 5-(R3-OOC-), 6-R2-1, 2, 3, 4-TETRAHYDROPYRIMIDINE

and pharmaceutically acceptable salts thereof wherein X is oxygen or sulfur; R is hydrogen, alkyl, cycloalkyl, aryl, or arylalkyl and Rl is hydrogen, alkyl, cycloalkyl, aryl, heterocyclo,

-C(-R5)(-R6)-(CH2)N-Y2, -C(-R5)(-R6)-(CH2)P-Y3

OR HALO SUBSTITUTED ALKYL, OR R AND R1 TAKEN TOGETHER WITH NITROGEN ATOM TO WHICH THEY ARE ATTACHED ARE 1-PYRROLIDINY PIPERIDINYL, 1-AZEPINYL, 4-MORPHOLINYL, 4-THIAMORPHOLINYL, PIPERAZINYL, 4-ARYLALKYL-1-PIPERAZINYL, 4-ARYLALKYL-1-PIPERAZI 4-DIARYLALKYL-1-PIPERAZINYL OR 1-PYRROLIDINYL, 1-PIPERIDIN OR 1-AZEIPINYL SUBSTITUTED WITH ALKYL, ALKOXY, ALKYLTHIO, TRIFLUOROMETHYL OR HYDROXY;

or halo substituted alkyl, or R and R1 taken together with the nitrogen atom to which they are attached are 1-pyrrolidinyl, 1piperidinyl, 1-azepinyl, 4-morpholinyl, 4-thiamorpholinyl, 1piperazinyl, 4-alkyl-1-piperazinyl, 4-arylalkyl-1-piperazinyl, 4-diarylalkyl-1-piperazinyl or 1-pyrrolidinyl, 1-piperidinyl, or 1-azeipinyl substituted with alkyl, alkoxy, alkylthio, halo, trifluoromethyl or hydroxy; R2 is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, aryl,

-C(-R5)(-R6)-(CH2)N-Y1,

OR HALO SUBSTITUTED ALKYL;

or halo substituted alkyl; R3 is hydrogen, alkyl, cycloalkyl, aryl, heterocyclo,

-C(-R5)(-R6)-(CH2)N-Y2, -C(-R5)(-R6)-(CH2)P-Y3,

OR HALO SUBSTITUTED ALKYL;

or halo substituted alkyl; R4 is aryl or heterocyclo; R5 and R6 are each independently hydrogen, alkyl, -(CH2)q-aryl or -(CH2)q-cycloalkyl; Y1 is cycloalkyl, aryl, heterocyclo, hydroxyl, alkoxy, aryl(CH2)m-O-, mercapto, alkylthio, aryl-(CH2)m-S-, amino, substituted amino, carbamoyl,

(SUBSTITUTED AMINO)-CO-, HETEROCYCLO-(CH2)M-CO-,

CARBOXYL, ALKOXYCARBONYL, ALKYL-CO-, ARYL-(CH2)M-CO-, ALKYL-COO- OR ARYL-(CH2)M-COO-

Y3 is hydroxyl, alkoxy, aryl-(CH2)m-O-, mercapto, alkylthio, aryl-(CH2)m-S-,

ALKYL-COO-, ARYL-(CH2)M-COO-,

AMINO, OR SUBSTITUTED AMINO;

amino, or substituted amino; q is 0, 1, 2 or 3; m is 0 or an integer of 1 to 6; n is 0 or an integer of 1 to 5; and p is an integer of 1 to 5.

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L20 ANSWER 7 OF 24 IFICDB COPYRIGHT 1998 IFI
ΑN
      1937330 IFIPAT; IFIUDB; IFICDB
ΤI
      PYRIMIDONES AS CARDIOTONIC, ANTI HYPERTENSIVE, CEREBROVASCULAR
      VASODILATOR AND ANTI-PLATELET AGENTS
      Ito, Kiyotaka, Ibaragi, JP
INF
      Murata, Masayoshi, Toyono, JP
     Takaya, Takao, Kawanishi, JP
IN
      ITO KIYOTAKA (JP); MURATA MASAYOSHI (JP); TAKAYA TAKAO (JP)
     Fujisawa Pharmaceutical Co, Ltd, Osaka, JP
PAF
      FUJISAWA PHARMACEUTICAL CO LTD JP (32600)
EXNAM Daus, Donald G
EXNAM Shen, Cecilia
ΑG
     Oblon, Fisher, Spivak, McClelland & Maier
     US 4824851 890425 (CITED IN 001 LATER PATENTS)
ΡI
ΑI
     US 88-173584 880325
RLI
     US 84-588902 840312 DIVISION 4612376
     US 86-870826 860605 DIVISION 4746664
PRAI
     GB 838290 830325
     GB 8315542 830607
     GB 8327859 831018
FI
     US 4824851
                  890425
     US 4612376
     US 4746664
     UTILITY; EXPIRED
חידים
FS
     CHEMICAL
```

$$Y=C<(-C(-R4)=C(-R3)---Z---)$$

New pyrimidine derivatives of the formula:

CLMN

AB

7

wherein Z is a group selected from

```
-N(-R2)-CO-N(-R1)-, -N=C(-O-R5)-N(-R1)-
AND -N(-R2)-C(-O-R5)=N-,
```

in which R1 and R2 are each hydrogen, alkenyl, ar(lower)alkyl or lower alkyl optionally substituted with epoxy, hydroxy, amino and/or lower alkylamino and R5 is lower alkyl, R3 is hydrogen, aryl optionally substituted with lower alkyl, lower alkoxy and/or halogen, or pyridyl optionally substituted with lower alkyl, R4 is hydrogen, lower alkyl or phenyl optionally substituted with lower alkoxy, and Y is=0, =S or =N-R6, in which R6 is lower alkyl; cyclo(lower)alkyl; ar(lower)alkyl optionally substituted with lower alkoxy; N-containing unsaturated heterocyclic group optionally substituted with hydroxy, lower alkyl, halogen or lower alkoxy, in which lower alkoxy substitutent may be substituted with epoxy, hydroxy, amino and/or lower alkylamino, provided that Y is=N-R6 when R3 and R4 are each hydrogen, and Y is=S or=N-R6 when R1 and R2 are each hydrogen

or lower alkyl and R3 is phenyl, and pharmaceutically acceptable salts thereof, and processes for preparation thereof and pharmaceutical composition comprising the same. These derivatives and salts thereof are useful as cardiotonic, antihypertensive agent, cerebrovascular vasodilator and antiplatelet agent. L20 ANSWER 8 OF 24 IFICDB COPYRIGHT 1998 IFI 1935173 IFIPAT; IFIUDB; IFICDB CIRCULATION-ACTIVE 4-PHENYL-6-SUBSTITUTED DIHYDROPYRIMIDINES Boshagen, Horst, Haan, DE Schramm, Matthias, Cologne, DE Stoltefuss, Jurgen, Haan, DE Thomas, Gunter, Wuppertal, DE BOSHAGEN HORST (DE); SCHRAMM MATTHIAS (DE); STOLTEFUSS JURGEN (DE);

THOMAS GUNTER (DE)

PAF Bayer Aktiengesellschaft, Leverkusen, DE

BAYER AG DE (29448)

EXNAM Daus, Donald G EXNAM Shen, Cecilia

Sprung Horn Kramer & Woods AG

4822798 890418 (CITED IN 001 LATER PATENTS) ΡI US

ΑI US 83-526931 830826 PRAI DE 82-3234684 820918 US 4822798 890418 FI DTUTILITY

FS CHEMICAL

MRN 4168 MFN: 0202

CLMN 10

NΑ

ΤI

TN

INF

AB Circulatory system-active novel dihydropyrimidines of the formula

> 2-R6, 4-(R1, R2, R3-PHENYL), 5-(R4-OOC-), 6-R5-1, 4-DIHYDRO-PYRIMIDINE

in which R1 and R6 are diverse organic radicals, and pharmacologically acceptable addition salts thereof.

ANSWER 9 OF 24 IFICDB COPYRIGHT 1998 IFI

1881718 IFIPAT; IFIUDB; IFICDB AΝ

N-SUBSTITUTED 3,4-DIHYDROPYRIMIDINE DERIVATIVES AS AGENTS FOR ΤI TREATING DISORDERS OF CARDIOVASCULAR SYSTEM; VASODILATION, HYPOTENSIVE

INF Cho, Hidetsura, Osaka, JP Mizuno, Akira, Kyoto, JP Shima, Keiyu, Kyoto, JP

CHO HIDETSURA (JP); MIZUNO AKIRA (JP); SHIMA KEIYU (JP) IN

PAF Suntory Limited, Osaka, JP

SUNTORY LTD JP (81755)

EXNAM Lee, Mary C

EXNAM Briscoe, Kurt G

ΑG Cushman, Darby & Cushman

US 4772602 880920 (CITED IN 001 LATER PATENTS) PΙ

US 86-839621 860314 ΑI

PRAI JP 85-51645 8551645 850315

US 4772602 880920 FΙ

DTUTILITY

FS CHEMICAL

4528 MFN: 0546 MRN

CLMN 2

GΙ 1 Drawing Sheet; 1 Figures;

AB A N-substituted 3,4-dihydropyrimidine derivative of the formula (1):

2,6-DI(CH3-),3-(R1-OOC-),4-(((NO2-)PHENYL)-),5-(R2-

1

Wherein R1 is -(CH2)n-X; X is substituted aminoethyl, substituted sulfideethyl, substituted or nonsubstituted heterocyclo-ethyl wherein the ethylene group is directly bonded to a hetero atom in the heterocyclo-methyl wherein the methylene group is directly bonded to a carbon atom in the heterocyclic ring; n is an integer from 0 to 8; R2 is straight, branched cyclic or cyclostraight alkyl having from one to thirteen carbon atoms, or aralkyl having from seven to thirteen carbon atoms and pharmacologically acceptable acid additional salts thereof have substantially strong and long lasting effects. Therefore the compounds are useful as agents for treating disorders of the cardiovascular system, and are useful, for example, as antihypertensive agents, circulation improvers and antianginal agents. A process for producing the above compounds economically and effectively is also disclosed.

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L20 ANSWER 10 OF 24 IFICDB COPYRIGHT 1998 IFI
      1878279 IFIPAT; IFIUDB; IFICDB
ИA
      DIHYDROPYRIMIDINE CARBOXYLIC ACID ESTERS; VASODILATION
TI
INF
      Atwal, Karnail, Cranbury, NJ
IN
      ATWAL KARNAIL
PAF
      E R Squibb & Sons, Inc, Princeton, NJ
      SQUIBB, E R & SONS INC (79248)
EXNAM Ford, John M
      Furman, Jr, Theodore R
      Levinson, Lawrence S
PΙ
      US
          4769371 880906 (CITED IN 001 LATER PATENTS)
         87-45956 870501
ΑI
     US
FI
     US 4769371 880906
DT
     UTILITY
FS
     CHEMICAL
os
      CA 110:114853
MRN
      4883 MFN: 0557
CLMN 16
AB
      Pyridine compounds of the formula
           1-R1, 2-(NH(H)===), 4-R2, 5-(R3-OOC-), 6-R4-1, 2, 3, 6-TETRA-1
           OR 1,6-DIHYDROPYRIDINE
```

wherein R4 is aryl or heterocyclo are disclosed. These compounds are useful as cardiovascular agents due to their calcium entry blocking vasodilator activity.

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L20 ANSWER 11 OF 24 IFICDB COPYRIGHT 1998 IFI
      1873100 IFIPAT; IFIUDB; IFICDB
AΝ
      MIXTURES OF OPTICALLY ACTIVE NITRODIHYDROPYRIDINES ACTIVE ON THE
ΤI
      CIRCULATORY SYSTEM
      Franckowiak, Gerhard, Wuppertal, DE
INF
      Gross, Rainer, Wuppertal, DE
      Grosser, Rolf, Leverkusen, DE
      Schramm, Matthias, Cologne, DE
      Thomas, Gunter, Wuppertal, DE
      FRANCKOWIAK GERHARD (DE); GROSS RAINER (DE); GROSSER ROLF (DE);
IN
      SCHRAMM MATTHIAS (DE); THOMAS GUNTER (DE)
      Bayer Aktiengesellschaft, Leverkusen, DE
PAF
      BAYER AG DE (29448)
EXNAM Lee, Mary C
EXNAM Bjorkman, Dale A
      Sprung Horn Kramer & Woods
ΑG
      US 4764516 880816 (CITED IN 005 LATER PATENTS)
PΙ
ΑT
      us 85-806071 851206
```

```
CHEMICAL
FS
MRN
      4492
           MFN: 0859
CLMN 7
      Pure enantiomers of 5-nitrodihydropyridine of the formula
AB
           1-R3, 2-R4, 3-(NO2-), 4-R, 5-R1, 6-R2-1, 4-DIHYDROPYRIDINE
       are mixed, wherein one of the enantiomers has a high vasodilative
      action and a low negative inotropic activity on heart muscle, the
      other enantiomer has a low vasoconstrictive action and a high
      positive inotropic activity on heart muscle, the mixture being high
      in vasodilative activity and in positive inotropic activity on
      heart muscle.
    ANSWER 12 OF 24 IFICDB COPYRIGHT 1998 IFI
      1861680 IFIPAT; IFIUDB; IFICDB
AN
      PYRIMIDINECARBOXYLIC ACID DERIVATIVES; VASODILATION, HYPOTENSIVE
TI
      AGENT
      Atwal, Karnail, Cranbury, NJ
INF
      Rovnyak, George C, Hopewell, NJ
      ATWAL KARNAIL; ROVNYAK GEORGE C
IN
      E R Squibb & Sons, Inc, Princeton, NJ
PAF
      SQUIBB, E R & SONS INC (79248)
PA
EXNAM Ford, John M
      Furman, Jr, Theodore R
      Levinson, Lawrence S
         4753946 880628 (CITED IN 002 LATER PATENTS)
PΙ
         87-36047 870408
ΑI
      US
      US 4753946 880628
FΙ
      UTILITY
DT
FS
      CHEMICAL
      CA 109:149562
os
MRN
      4840
           MFN: 0704
CLMN 18
AΒ
      Pyridine compounds of the formula
           1-(R15-OOC-), 2-(R1-S-), 4-R2, 5-(R3-OOC-), 6-R4-1, 6-DIHY-
           DROPYRIMIDINE
       wherein R4 is aryl or heterocyclo are disclosed. These compounds
      are useful as cardiovascular agents due to their calcium entry
      blocking vasodilator activity.
    ANSWER 13 OF 24 IFICDB COPYRIGHT 1998 IFI
L20
      1853790 IFIPAT; IFIUDB; IFICDB
AN
      PHARMACEUTICAL USE OF ((((3-PYRIDINYL)METHYLEN)AMINO)OXY)ALKANOIC
TI
      ACIDS AND ESTERS; THROMBOXANE SYNTHETASE INHIBITION
      Freyne, Eddy J E, Rumst, BE
INF
      Raeymaekers, Alfons H M, Beerse, BE
      Sipido, Victor, Merksem, BE
      Venet, Marc G, Paris, FR
      FREYNE EDDY J (BE); RAEYMAEKERS ALFONS H (BE); SIPIDO VICTOR (BE);
IN
      VENET MARC G (FR)
      Janssen Pharmaceutica NV, Beerse, BE
PAF
      JANSSEN PHARMACEUTICA N V BE (43736)
EXNAM Jiles, Henry R
EXNAM Bjorkman, Dale A
      Dellenbaugh, Geoffrey G
AG
PΙ
      US 4746671 880524
      US 86-888670 860723
ΑI
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PRAI DE 84-3447169 841222 US 4764516 880816

UTILITY; EXPIRED

FТ

DT

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US 4746671 880524
FΤ
      UTILITY
DT
FS
      CHEMICAL
MRN
      4709
            MFN: 0654
      4709
                  0655
CLMN
      29
      Novel ((((3-pyridinyl)methylen)amino)oxy)alkanoic acids and esters,
AB
      compositions containing the same, and methods of treating clinical
      conditions related with the production of thromboxane A2,
      prostacyclin and/or prostaglandins D2, E2 and F2 Alpha .
     ANSWER 14 OF 24 IFICDB COPYRIGHT 1998 IFI
L20
      1834310 IFIPAT; IFIUDB; IFICDB
ΑN
      2-SUBSTITUTED THIO OR OXY-4-ARYL OR HETEROCYCLO-5-CARBOXY-1,4-
ΤI
      DIHYDROPYRIMIDINES, COMPOSITION CONTAINING THEM, AND METHOD OF
      USING THEM TO REDUCE BLOOD PRESSURE; VASODILATORS
      Atwal, Karnail, Cranbury, NJ
INF
      ATWAL KARNAIL
IN
      E R Squibb & Sons, Inc, Princeton, NJ
PAF
      SQUIBB, E R & SONS INC (79248)
PΑ
EXNAM Jiles, Henry R
EXNAM Briscoe, Kurt G
      Davis, Stephen B
AG
      Levinson, Lawrence S
      US 4728652 880301 (CITED IN 006 LATER PATENTS)
PΙ
      US 86-854201 860421
ΑI
      US 85-736151 850520 CONTINUATION-IN-PART ABANDONED
RLI
FI
      US 4728652 880301
      UTILITY; EXPIRED
DT
FS
      CHEMICAL
      4785
             MFN: 0445
MRN
CLMN
      1,4-Dihydropyrimidines of the formula
ΑB
           2-(R1-X-), 4-R4, 5-(R3-OOC-), 6-R2-1, 4-DIHYDROPYRIMIDINE
       wherein X is sulfur or oxygen and R4 is aryl or heterocyclo and
      disclosed. These compounds are useful as cardiovacular agents,
      particularly anti-hypertensive agents, due to their vasodilator
      activity.
L20 ANSWER 15 OF 24 IFICDB COPYRIGHT 1998 IFI
      1832598 IFIPAT; IFIUDB; IFICDB
ΑN
      PYRIMIDINE DERIVATIVES AND COMPOSITION OF THE SAME; CEREBOVASCULAR
ΤI
      DISEASES
      Kuno, Atsushi, Mino, JP
INF
      Sugiyama, Yoshie, Takarazuka, JP
      Takasugi, Hisashi, Osaka, JP
      Takaya, Takao, Kawanishi, JP
      KUNO ATSUSHI (JP); SUGIYAMA YOSHIE (JP); TAKASUGI HISASHI (JP);
IN
      TAKAYA TAKAO (JP)
      Fujisawa Pharmaceutical Co, Ltd, Osaka, JP
PAF
      FUJISAWA PHARMACEUTICAL CO LTD JP (32600)
EXNAM Hollrah, Glennon H
EXNAM Turnipseed, James H
       Oblon, Fisher, Spivak, McClelland & Maier
AG
          4727073 880223 (CITED IN 005 LATER PATENTS)
 ΡI
          85-779043 850923
ΑI
      US
 PRAI
      GB
          8424711 841001
       GB 859623 850415
      US 4727073 880223
 FI
      UTILITY; EXPIRED
 DT
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US 85-794999 851104 CONTINUATION-IN-PART ABANDONED

RLI

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treatment of cerebrovascular disease, of the formula:
           2-R3, 4-AR, 5-R1, 6-R2-PYRIMIDINE
       wherein Ar, R1, R2 and R3 are defined in the specification.
L20 ANSWER 16 OF 24 IFICDB COPYRIGHT 1998 IFI
     1831003 IFIPAT; IFIUDB; IFICDB
ΑN
      PYRIMIDINE COMPOUNDS HAVING ACTIVITY AS A CARDIOTONIC
ΤI
      ANTI-HYPERTENSIVE CEREBROVASCULAR VASODILATOR AND ANTI-PLATELET
     AGGREGATION AGENT
     Ito, Kiyotaka, Ibaragi, JP
INF
      Murata, Masayoshi, Osaka, JP
      Takaya, Takao, Kawanishi, JP
      ITO KIYOTAKA (JP); MURATA MASAYOSHI (JP); TAKAYA TAKAO (JP)
TN
      Fujisawa Pharmaceutical Co, Ltd, Osaka, JP
PAF
      FUJISAWA PHARMACEUTICAL CO LTD JP (32600)
EXNAM Daus, Donald G
EXNAM Shen, Cecilia
      Oblon, Fisher, Spivak, McClelland & Maier
      US 4725600 880216 (CITED IN 010 LATER PATENTS)
PΙ
      US 85-751867 850705
ΑI
PRAI GB 8417852 840713
      GB 8423667 840919
      GB 8430456 841203
      US 4725600 880216
FI
      UTILITY; EXPIRED
      CHEMICAL
FS
      4777 MFN: 0307
MRN
CLMN 18
      The invention relates to pyrimidine compounds of the formula:
AΒ
           1-R5, 2-(R4---), 3-R3, 4-(R2---), 5-R6, 6-R1-DI-, TETRA- OR
           HEXAHYDROPYRIMIDINE
       wherein the substituents R1, R2, R3, R4, R5 and R6 are as herein
      defined, having activity as a cardiotonic, anti-hypertensive,
      cerebrovascular vasodilator and anti-platelet aggregation agent.
L20 ANSWER 17 OF 24 IFICDB COPYRIGHT 1998 IFI
      1785208 IFIPAT; IFIUDB; IFICDB
AN
      2,6-DIMETHYL-3N,5-DISUBSTITUTED-4-(SUBSTITUTED PHENYL)3,4-
ΤI
      DIHYDROPYRIMIDINE COMPOUNDS AND A METHOD FOR TREATING DISORDERS OF
      CARDIOCIRCULAR SYSTEM; HYPOTENSIVE AGENTS, ANTI-ANGINA
      Aisaka, Kazuo, Osaka, JP
INF
      Cho, Hidetsura, Ibaraki, JP
      Ishihara, Takafumi, Toyonaka, JP
      Sato, Fumio, Nagaokakyo, JP
      AISAKA KAZUO (JP); CHO HIDETSURA (JP); ISHIHARA TAKAFUMI (JP); SATO
IN
      FUMIO (JP)
      Suntory Limited, Osaka, JP
PAF
      SUNTORY LTD JP (81755)
PA
EXNAM Daus, Donald G
EXNAM Shen, Cecilia
      Cushman, Darby & Cushman
ΑG
      US 4683234 870728 (CITED IN 004 LATER PATENTS)
PΙ
      US 85-708885 850306
ΑI
      3 Feb 2004
DCD
```

The invention relates to new pyrimidine derivatives, useful in the

3S

AB

MRN

CLMN 11

CHEMICAL

4765

MFN: 0345

PRAI JP 84-101569 84101569 840519

JP 84-107004 84107004 840526 JP 84-163614 84163614 840803 FI US 4683234 870728 DT UTILITY FS CHEMICAL MRN 4381 MFN: 0326

CLMN 13
AB N-substituted 3,4-dihydropyrimidine derivatives of the formula:

2,6-DI(CH3-),3-(R1-OC-),4-((X1,X2,X3-PHENYL)-),5-(R2-OOC)-3,4-DIHYDROPYRIMIDINE

wherein X1, X2 and X3 are the same or different and are hydrogen, nitro, halogen, cyano, trifluoromethyl, methylthio or lower alkoxy; R1 is (C1-C13) straight or branched alkoxy, (C4-C12) straight or branched alkenyloxy, (C5-C8) straight or branched alkynyloxy, (C1-C4) straight or branched alkyl, (C3-C6) cycloalkyl, -O-(CH2)n-A wherein n is 1, 2 or 3, A is cyclopropyl, cyclobutyl, cyclopentyl, or (C1-C3) haloalkyl, -O-(CH2)m-O-B wherein m is 1, 2, 3 or 4, B is (C1-C3) alkyl, or -O-(CH2)l-D wherein l is an integer from zero to 8, D is phenyl or substituted phenyl; R2 is (C1-C12) straight or branched alkyl, (C4-C7) straight or branched alkenyl, -(CH2)p-E wherein p is 1, 2 or 4, E is cyclopropyl, cyclobutyl or cyclopentyl,

- (CH2)Q-N(-G)-J

wherein q is 2, 3 or 4; G and J are the same or different and are phenyl, methyl, ethyl, isopropyl, benzyl, phenethyl, methoxycarbonyl or ethoxycarbonyl, or -(CH2)r-O-L wherein r is 1 or 2, L is methyl, ethyl or phenyl, with the proviso that wherein R1 is methoxy or ethoxy, R2 is neither methyl nor ethyl, and pharmaceutically acceptable acid addition salts thereof are useful as agents for treating disorders of the cardiovascular system, for example, hypotensive agents, agents for americaltion of brain circulation and anti-angina pectoris agents. Processes for producing the above compounds economically and effectively are also disclosed.

L20 ANSWER 18 OF 24 IFICDB COPYRIGHT 1998 IFI 1774885 IFIPAT; IFIUDB; IFICDB ΑN METHOD FOR TREATMENT OF GASTROINTESTINAL DISORDERS; ΤI 2-AMINO-5-HYDROXY-4-METHYLPYRIMIDINE LaMattina, John L, Ledyard, CT INF IN LAMATTINA JOHN L Pfizer Inc, New York, NY PAF PFIZER INC (65376) EXNAM Daus, Donald G EXNAM Kapner, Stephen M Dryer, Mark ΑG Knuth, Charles J Richardson, Peter C (CITED IN 004 LATER PATENTS) 4673677 870616 ΡI US 85-764351 850809 ΑI US 83-538233 831003 DIVISION 4554276 RLI US 4673677 870616 FI US 4554276 DTUTILITY FS CHEMICAL CLMN A method for the treatment of gastrointestinal disorders in a patient which comprises administering to the patient a gastric anti-secretory effective amount of a 2-amino-5-hydroxy-

4methylpyrimidine or a substituted amino derivative thereof, optionally in admixture with an additional gastric anti-secretory agent. ANSWER 19 OF 24 IFICDB COPYRIGHT 1998 IFI L20 1739684 IFIPAT; IFIUDB; IFICDB NΑ 3N-SUBSTITUTED 3,4-DIHYDROPYRIMIDINES AS AGENTS FOR TREATING TΙ DISORDERS OF CARDIOVASCULAR SYSTEM; VASODILATORS INF Aisaka, Kazuo, Mishima, JP Cho, Hidetsura, Ibaraki, JP Emon, Mariko, Matsudo, JP AISAKA KAZUO (JP); CHO HIDETSURA (JP); EMON MARIKO (JP) IN Suntory Limited, Osaka, JP PAF SUNTORY LTD JP (81755) PΑ EXNAM Daus, Donald G EXNAM Shen, Cecilia Cushman, Darby & Cushman AG US 4640922 870203 (CITED IN 003 LATER PATENTS) PΙ US 85-708887 850306 ΑI PRAI JP 84-44729 8444729 840308 US 4640922 870203 FI UTILITY; EXPIRED DTCHEMICAL FS 4381 MFN: 0324 MRN CLMN 4 A 3N-substituted 3,4-dihydropyrimidine derivative of the formula: AΒ

> 2-H3C, 3-(R1-OOC-), 4-R, 5-(R2-OOC-), 6-X-3, 4-DIHYDRO-PYRIMIDINE

wherein Rl is methyl or ethyl, R2 is methyl or ethyl, R is phenyl or substituted phenyl, X is chloro or methyl and pharmaceutically acceptable acid addition salts thereof have substantially the same strong vasodilative and Ca++ antagonistic effects as nicardipine and therefore are useful as agents for treating disorders of the cardiovascular system, for example, hypotensive agents, agents for amelioration of brain circulation and anti-angina pectoris agents. Processes for producing the above compounds economically and effectively are also disclosed.

L20 ANSWER 20 OF 24 IFICDB COPYRIGHT 1998 IFI

AN 1705269 IFIPAT; IFIUDB; IFICDB

TI 1,4-DIHYDROPYRIDINE-3,5-DICARBOXYLIC ACID ESTER DERIVATIVES AND PHARMACEUTICAL COMPOSITIONS; VASODILATION; HYPOTENSIVE AGENTS

INF Aihara, Kenichi, Fukuoka, JP Ao, Hideki, Nakatsu, JP Araki, Kazuhiko, Nakatsu, JP Inui, Jun, Tokyo, JP

IN AIHARA KENICHI (JP); AO HIDEKI (JP); ARAKI KAZUHIKO (JP); INUI JUN (JP)

PAF Yoshitomi Pharmaceutical Industries, Ltd, Osaka, JP YOSHITOMI PHARMACEUTICAL INDUSTRIES LTD JP (93712)

EXNAM Ramsuer, Robert W

AG Sughrue, Mion, Zinn, Macpeak & Seas

PI US 4618607 861021 (CITED IN 005 LATER PATENTS)

AI US 82-448576 821210

PRAI WO 82-JP75 82JP75 820317

FI US 4618607 861021

DT UTILITY; EXPIRED

FS CHEMICAL

MRN 4588 MFN: 0728

CLMN 7

AB 1,4-Dihydropyridine-3,5-dicarboxylic acid ester derivatives of the

```
general formula:
```

2-R1, 3-(R3-OOC-), 4-((X1, X2, X3-(Y-HC=W-HC=)>HC)-)-1, 4-DIHYDROPYRIDINE

or acid addition salts thereof, wherein W is -CH= or -N=; Y is CH=CH-, -O-, -S-, -CH=N(O)p- (p is zero or 1) or -N(R)- (R is hydrogen or lower alkyl); X1, X2 and X3 are the same or different, and are each hydrogen, halogen, nitro, trifluoromethyl, cyano or lower alkylthio; Z is aryl or 5- or 6membered aromatic heterocyclic ring (which may have a substituent or two or three substituents which may be the same or different, and the substituent may be halogen, lower alkyl, lower alkoxy, lower alkanoylamino, cyano, nitro, lower alkylthio, trifluoromethyl, sulfamoyl, di-lower alkylsulfamoyl, amino or dilower alkylamino);

-N < (-A -)

is 5- to 7-membered heterocyclic ring which may have nitrogen atom, oxygen atom, sulfur atom or unsaturated bond on the ring, and may be substituted by lower alkyl, lower alkoxycarbonyl, lower alkanoylamino, ethylenedioxy or -(CH2)m-OR4 (R4 is hydrogen, lower alkyl or lower alkanoyl and m is 0, 1 or 2); R1 and R2 are the same or different, and are each lower alkyl; R3 is lower alkyl, aralkyl, heteroaralkyl; and n is an integer 1 to 5. Such compounds are useful as antihypertensive agents and as therapeutic agents for cardiac and cerebral circulation disorders.

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L20 ANSWER 21 OF 24 IFICDB COPYRIGHT 1998 IFI
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AN 1599112 IFIPAT; IFIUDB; IFICDB

TI ANTIHYPERTENSIVE N-SUBSTITUTED 1,4-DIHYDROPYRIDINES; WATER-SOLUBLE VASODIALATORS

INF Jones, Howard, Ossining, NY
Loev, Bernard, Scarsdale, NY
Suh, John T, Greenwich, CT

IN JONES HOWARD; LOEV BERNARD; SUH JOHN T

PAF USV Pharmaceutical, Tuckahoe, NY

PA USV PHARMACEUTICAL CORP (88014)

EXNAM Jiles, Henry R

EXNAM Bjorkman, Dale A

PI US 4520131 850528 (CITED IN 004 LATER PATENTS)

AI US 83-471957 830303

FI US 4520131 850528

DT UTILITY; REASSIGNED; EXPIRED

FS CHEMICAL

os CA 103:123366

MRN 4103 MFN: 0451

CLMN 4

AB Antihypertensive compounds of the formula

1-(R4-N(-R3)-Z-), 2, 6-DI(R2-), 3, 5-BIS(R1-OOC-), 4-AR-1, 4-DIHYDROPYRIDINE

where the substituents are as herein defined and where Z is alkylene, R3 is alkoxyalkyl and R4 is hydroxyalkyl.

L20 ANSWER 22 OF 24 IFICDB COPYRIGHT 1998 IFI

AN 1293057 IFIPAT; IFIUDB; IFICDB

TI SILA-SUBSTITUTED 1,4-DIHYDROPYRIDINE DERIVATIVES AND THEIR MEDICINAL USE

INF Bentlage, Anke, Braunschweig, DE Tacke, Reinhold, Braunschweig, DE Towart, Robertson, Wuppertal, DE

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Vater, Wulf, Leverkusen, DE
      BENTLAGE ANKE (DE); TACKE REINHOLD (DE); TOWART ROBERTSON (DE);
IN
      VATER WULF (DE)
      Bayer Aktiengesellschaft, Leverkusen, DE
PAF
      BAYER AG DE (29448)
PΑ
EXNAM Jiles, Henry R
EXNAM Bond, Robert T
      Sprung, Felfe, Horn, Lynch & Kramer
ΑG
      US 4237137 801202 (CITED IN 010 LATER PATENTS)
PΤ
      US
         79-64936 790808
ΑI
PRAI DE 78-2837477 780828
     US 4237137 801202
FI
      UTILITY
DT
      CHEMICAL
FS
      15
CLMN
      The invention provides sila-substituted 1,4-dihydropyridine
AΒ
      derivatives useful as medicament which influence the circulation.
      Also included in the invention are methods for the procurement of
      said derivatives, compositions containing said derivatives and
      methods for the use of said derivatives.
L20 ANSWER 23 OF 24 IFICDB COPYRIGHT 1998 IFI
      1024510 IFIPAT; IFIUDB; IFICDB
ΑN
      1,4-DIHYDROPYRIDINE ESTERS; CORONARY DILATORS, ANTI-FIBRILLATORS,
TI
      ANTI-HYPERTENSIVES, SPASMOLYTICS
      Bossert, Friedrich, Wuppertal, DE
INF
      Stoepel, Kurt, Wuppertal, DE
      Vater, Wulf, Opladen, DE
      Wehinger, Egbert, Neviges, DE
      BOSSERT FRIEDRICH; STOEPEL KURT; VATER WULF; WEHINGER EGBERT
IN
      Bayer Aktiengesellschaft, DE
PAF
      BAYER AG DE (29448)
PΑ
EXNAM Rotman, Alan L
          3974278 760810 (CITED IN 005 LATER PATENTS)
PΙ
      US
      US 75-576724 750512
ΑI
      US 74-485300 740702 DIVISION ABANDONED
RLI
      DE 73-2335466 730712
PRAI
      US 3974278 760810
FΙ
      BE 817540
      DE 2335466
      FR 2236497
      GB 1436289
      NL 7409344
      UTILITY
DT
FS
      CHEMICAL
      CA 82:156107
OS
CLMN
      A new class of 1,4-dihydropyridines which are characterized by the
AB
      presence of ester substitutes at positions 3 and 5 of the nucleus
      and by the presence of an alkoxyalkyl at position 2. The products
      exhibit coronary activity and have particular application as
      coronary dilators, anti-fibrillators, antihypertensives, and as
      muscular and vascular spasmolytics.
L20 ANSWER 24 OF 24 IFICDB COPYRIGHT 1998 IFI
      1018402 IFIPAT; IFIUDB; IFICDB
ΑN
      5-METHYLTHIO-PYRIMIDINE VASODILATORS
ΤI
      Claverie, Jean-Marie, Enghien-les-Bains, FR
INF
      Loiseau, Gerard, Sceaux, FR
      Mattioda, Georges, Enghien-les-Bains, FR
      Millischer, Rene, Pringy, FR
       Percheron, Francois, Brevannes, FR
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CLAVERIE JEAN-MARIE; LOISEAU GERARD; MATTIODA GEORGES; MILLISCHER

IN

RENE; PERCHERON FRANCOIS Produits Chimiques Ugine Kuhlmann, Paris, FR PRODUITS CHIMIQUES UGINE KUHLMANN FR (47097) EXNAM Schenkman, Leonard Beveridge, DeGrandi, Kline & Lunsford AG PΙ 3968214 760706 (CITED IN 005 LATER PATENTS) ΑI 73-406129 731012 US PRAI FR 73-7324875 73.24875 730706 US 3968214 760706 FΙ DE 2342881 FR 2244520 GB 1450211 NL 7312324 UTILITY DTFS CHEMICAL CA 82:156364 OS CLMN 13 AB The compounds of the formula:

DRAWING

IN WHICH Y represents a chlorine atom or an alkoxy, dialkylaminoalkoxy, pyridylalkoxy group, R1 and R2 are identical or different substituents and represent alkyl or alkoxycarbonylalkyl groups, substituted or unsubstituted phenyl groups or form together with the nitrogen atom to which they are attached, a heterocyclic ring which may contain another heteroatom, R3 and R4 are identical or different substituents and represent alkyl groups or form, together with the nitrogen atom to which they are attached, a heterocyclic ring which may contain another hetero-atom; process for their preparation; medicaments comprising such compounds or salts thereof, and their use in the treatment of human beings. The present invention relates to new pyrimidines, to their use as medicaments on account of their spasmolytic, coronary dilator and hypoglycemiant properties and to their preparation. These compounds, derived from 5-methylthio-pyrimidine, may be represented by the general formula:

DRAWING

IN WHICH Y represents a chlorine atom or an alkoxy, dialkylaminoalkoxy or pyridylalkoxy group, the alkoxy and alkyl groups preferably containing 1 to 4 carbon atoms, R1 and R2 are identical or different substituents and represent alkyl, alkoxycarbonylalkyl, substituted or unsubstituted phenyl or benzyl groups or form, together with the nitrogen atom to which they are attached, a heterocyclic ring which may contain another hetero-atom, the alkyl and alkoxy groups preferably containing 1 to 4 carbon atoms, R3 and R4 are identical or different substituents and represent alkyl groups preferably containing 1 to 4 carbon atoms or form, together with the nitrogen atom to which they are attached, a heterocyclic ring which may possibly contain another hetero-atom. Substituents of the phenyl group may be for example halogen atoms or alkyl, alkoxy or trihalomethyl groups. The compounds of formula (I) may be prepared for example by reacting a compound of the formula:

DRAWING

IN WHICH R1 and R2 have the same significance as above, with an ethylenediamine of the formula:

DRAWING

in which R3 and R4 have the same significance as above, and possibly replacing the remaining chlorine atom by an alkoxy, dialkylamino-alkoxy or pyridylalkoxy group. The reaction with the compound of formula (III) is preferably effected in a solvent, in the presence of an acid-absorbing agent, at a temperature between 20*C. and 100*C. The substitution of the remaining chlorine atom may be effected for example by the action of an alcoholate of an alkali metal or by the action of an excess of the corresponding alcohol and caustic potash at the refluxing temperature.

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=> s 111 and 12
         927 L11 AND L2
L21
=> s 121 and 110
L22
          38 L21 AND L10
=> s 121 and 114
          104 L21 AND L14
L23
=> s endothelin#####
          112 ENDOTHELIN######
L24
=> s 124 and 121
             5 L24 AND L21
L25
=> d 125 1- bib, ab
YOU HAVE REQUESTED DATA FROM 5 ANSWERS - CONTINUE? Y/(N):y
L25 ANSWER 1 OF 5 IFICDB COPYRIGHT 1998 IFI
      2798691 IFIPAT; IFIUDB; IFICDB
AN
      BENZENESULFONAMIDE DERIVATIVE AND PROCESS FOR PREPARING THEREOF;
ΤТ
    ENDOTHELIN ANTAGONISTS
      Kikkawa, Kohei, Kawaguchi, JP
INF
      Kohno, Rikako, Omiya, JP
      Yamada, Koichiro, Saitama-ken, JP
      Yasuda, Kosuke, Saitama-ken, JP
      Kikkawa Kohei (JP); Kohno Rikako (JP); Yamada Koichiro (JP); Yasuda
ΙN
      Kosuke (JP)
      Tanabe Seiyaku Co, Ltd, Osaka, JP
PAF
      Tanabe Seiyaku Co Ltd JP (82733)
EXNAM Grumbling, Matthew V
      Finnegan, Henderson, Farabow, Garrett & Dunner, LLP
ΑG
      US 5589478 961231
ΡI
      US 94-356958 941216
ΑI
     JP 93318779 931217
PRAI
      JP 94140628 940623
      JP 94183553 940804
      US 5589478 961231
FI
DT
      UTILITY
FS
      CHEMICAL
      7261 MFN: 0101
MRN
CLMN 15
      A benzenesulfonamide derivative of the formula (I):
AB
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DRAWING

wherein Ring A and Ring B are the same or different and each

substituted or unsubstituted benzene ring, Q is a single bond or a group of the formula: -O-, -S-, -SO-, -SO2- or -CH2-, Y is a group of the formula: -O-, -S- or -NH-, Alk is lower alkylene group or lower alkenylene group, Z is a single bond or a group of the formula: -O- or -NH-, R is a substituted or unsubstituted aromatic heterocyclic or aryl group, R1 is hydrogen atom, trifluoromethyl group, substituted or unsubstituted lower alkyl group, substituted or unsubstituted lower alkenyl group, mono- or di-lower alkylamino group, substituted or unsubstituted lower alkylthio group, substituted or unsubstituted lower alkoxy group, substituted or unsubstituted lower alkynyl group, aromatic heterocyclic group, substituted or unsubstituted aliphatic heterocyclic group or aryl group, provided that when Z is a single bond, R is a substituted or unsubstituted aromatic heterocyclic group, or a pharmaceutically acceptable salt thereof, and processes for preparing the same, these compounds having endothelin antagonistic activity and being useful in the prophylaxis or treatment of various diseases caused by endothelin.

L25 ANSWER 2 OF 5 IFICDB COPYRIGHT 1998 IFI 2745319 IFIPAT; IFIUDB; IFICDB SULFONYLAMINOPYRIMIDINES; ENDOTHELIN RECEPTOR INHIBITORS ΤI Breu, Volker, Schliengen, DE INF Burri, Kaspar, Binningen, CH Cassal, Jean-Marie, Mulhouse, FR Clozel, Martine, Saint-Louis, FR Hirth, Georges, Huningue, FR Loffler, Bernd-Michael, Oberrimsingen, DE Muller, Marcel, Frenkendorf, CH Neidhart, Werner, Bartenheim, FR Ramuz, Henri, Birsfelden, CH Breu Volker (DE); Burri Kaspar (CH); Cassal Jean-Marie (FR); Clozel ΤN Martine (FR); Hirth Georges (FR); Loffler Bernd-Michael (DE); Muller Marcel (CH); Neidhart Werner (FR); Ramuz Henri (CH) Hoffmann-La Roche Inc, Nutley, NJ PAF Hoffmann-La Roche Inc (39424) PA EXNAM Ford, John M Gould, George M ΑG Johnston, George W Silverman, Robert A US 5541186 960730 PΙ US 94-266072 940627 ΑI CH 931924 930628 PRAI CH 941575 940520 US 5541186 960730 FIUTILITY; REASSIGNED DTCHEMICAL FS CLMN 23 A compound of the formula AB

DRAWING

wherein Rl to R, Ra, RbX, Y, Z, m and n have the significance given in the description, can be used as medicaments, especially for the treatment and prophylaxix of conditions which are associated with **endothelin** activities.

Cassal, Jean-Marie, Mulhouse, FR Clozel, Martine, St Louis, FR Hirth, Georges, Huningue, FR Loffler, Bernd-Michael, Oberrimsingen, DE Muller, Marcel, Frenkenforf, CH Neidhart, Werner, Bartenheim, FR Ramuz, Henri, Birsfelden, CH Breu Volker (DE); Burri Kaspar (CH); Cassal Jean-Marie (FR); Clozel ΤN Martine (FR); Hirth Georges (FR); Loffler Bernd-Michael (DE); Muller Marcel (CH); Neidhart Werner (FR); Ramuz Henri (CH) Hoffmann-La Roche Inc, Nutley, NJ PAF Hoffmann-La Roche Inc (39424) PΑ EXNAM Dees, Jose G EXNAM Carr, Deborah D Gould, George M AG Johnston, George W Silverman, Robert A (CITED IN 004 LATER PATENTS) 5420129 950530 US PΙ US 93-164167 931208 AΙ PRAI CH 92-3777 923777 921210 CH 92-3799 923799 921211 CH 93-3114 933114 931014 US 5420129 950530 FI DTUTILITY FS CHEMICAL 6861 MFN: 0023 MRN 0027 6861 14 CLMN The invention is concerned with novel sulphonamides and their use AB as medicaments. In particular, the invention is concerned with

DRAWING

compounds of the formula

wherein R1 is hydrogen, lower-alkyl, lower-alkoxy, lower-alkylthio, halogen or trifluoromethyl; R2 is hydrogen, lower-alkyl, halogen, lower-alkoxy, trifluoromethyl or -OCH2COOR9; R3 is hydrogen, lower-alkyl, halogen, lower-alkylthio, trifluoromethyl, lower-alkoxy or trifluoromethoxy; R2 and R3 together are butadienyl, methylenedioxy, ethylenedioxy or isopropylidenedioxy; R4 is hydrogen, lower-alkyl, trifluoromethyl, lower-alkoxy, lower-alkylthio, hydroxy-lower-alkyl, hydroxy-lower-alkoxy, hydroxy-lower-alkoxy-lower-alkyl, hydroxy-lower-alkoxy-loweralkoxy, alkoxy-lower-alkyl, alkoxy-lower-alkyloxy, loweralkylsulfinyl, lower-alkylsulfonyl, 2-methoxy-3-hydroxypropoxy, 2-hydroxy-3-phenylpropyl, amino-lower-alkyl, lower-alkylaminolower-alkyl, di-lower-alkylamino-lower-alkyl, amino, loweralkylamino, di-lower-alkylamino, arylamino, aryl, arylthio, aryloxy, aryl-lower-alkyl, heterocyclyl, heterocyclo-loweralkyl, heterocyclylamino, heterocyclylthio, heterocyclyloxy, CHO, -CH2OH or -CH2Cl; R5 to R8 are independently hydrogen, halogen, trifluoromethyl, lower-alkoxy, lower-alkylthio or cyano; R6 and R5 or R7 together are butadienyl, methylene-dioxy, ethylenedioxy or isopropylidenedioxy; X is -O- or -S-; Y is -CHO, C1-4-alkyl, -(CH2)1-4-Z-R9, -(CH2)1-4-OC(O)(CH2).14CH3, -(CH2)1-4OC(O)Het, -(CH2)1-4NHC(O)R10, -(CH2)14OCH2CH(OH)CH2OH and cyclic ketals thereof, -(CH2)14NR9CH2CH(OH)CH2OH, -(CH2)1-4OCH2CH2SCH3, -(CH2)14OCH2CH2S(O)CH3, -(CH2)1-4O(CH2)1-4-Z H,-(CH2)1-40(CH2)140C(O)R10, -(CH2)1-4NR9(CH2)1-4Z H, -(CH2)1-40(CH2)1-40C(0)Het, -(CH2)0-3CH(OH)R10,-(CH2)0-3CH(OH)(CH2)1-4Z H, -(CH2)03CH(OH)CH2SCH3, -(CH2)0-3CH(OH)CH2S(O)CH3, -(CH2)03CH(OH)OCH2CH2OH,

heterocyclic residue; Hal is halogen; and n is 0 or 1; and salts thereof. L25 ANSWER 4 OF 5 IFICDB COPYRIGHT 1998 IFI 2589324 IFIPAT; IFIUDB; IFICDB AN QUINAZOLINONES SUBSTITUTED WITH PHENOXYPHENYLACETIC ACID TIDERIVATIVES; CARDIOVASCULAR DISORDERS OR HYPOTENSIVE AGENTS Bagley, Scott W, Rahway, NJ INF Chakravarty, Prasun K, Edison, NJ Chen, Anna, Rahway, NJ Dhanoa, Daljit S, Tinton Falls, NJ Fitch, Kenneth J, Cranford, NJ Greenlee, William J, Teaneck, NJ Naylor, Elizabeth M, Scotch Plains, NJ Tata, James R, Westfield, NJ Walsh, Thomas F, Westfield, NJ Williams, Jr, David L, Telford, PA Bagley Scott W; Chakravarty Prasun K; Chen Anna; Dhanoa Daljit S; IN Fitch Kenneth J; Greenlee William J; Naylor Elizabeth M; Tata James R; Walsh Thomas F; Williams David L Jr Merck & Co, Inc, Rahway, NJ PAF Merck & Co Inc (54136) EXNAM Ford, John M ΑG Camara, Valerie J Daniel, Mark R DiPrima, Joseph F US 5401745 950328 (CITED IN 001 LATER PATENTS) PΙ US 93-33595 930319 ΑI FI US 5401745 950328 DΤ UTILITY FS CHEMICAL

-(CH2)0-3C(O)(CH2)1-4CH3, -(CH2)0-3C(O)(CH2)14Z R11,

-(CH2)0-3C(0)CH2Hal, -(CH2)1-4Hal, -(CH2)1-4CN, -(CH2)03C(0)OR9, -OR12 or -SR12; R9 is hydrogen or C1-4-alkyl; R10 is C1-4-alkyl; R11 is hydrogen, C1-4-alkanoyl or heterocyclylcarbonyl; R12 is C1-4-alkyl or -(CH2)0-4-aryl; Z is -O-, -S- or -NR9-; Het is a

DRAWING

Phenoxyphenylacetic acids and derivatives of general structural

MFN: 0283

7238

formula I

MRN 72 CLMN 10

AΒ

have **endothelin** antagonist activity and are therefore useful in treating cardiovascular disorders, such as hypertension, postischemic renal failure, vasospasm, cerebal and cardiac ischemia, myocardial infarction, inflammatory diseases, Raynaud's disease, and endotoxic shock, and asthma.

L25 ANSWER 5 OF 5 IFICDB COPYRIGHT 1998 IFI 2451969 IFIPAT; IFIUDB; IFICDB ΑN SULFONAMIDES ΤI Burri, Kaspar, Binningen, CH INF Clozel, Martine, St Louis, FR Fischli, Walter, Allschwil, CH Hirth, Georges, Huningue, FR Loffler, Bernd-Michael, Oberrimsingen, DE Neidhart, Werner, Bartenheim, FR Ramuz, Henri, Birsfelden, CH Burri Kaspar (CH); Clozel Martine (FR); Fischli Walter (CH); Hirth IN Georges (FR); Loffler Bernd-Michael (DE); Neidhart Werner (FR); Ramuz Henri (CH) Hoffmann-La Roche Inc, Nutley, NJ PAF

```
Aª "PA
          Hoffmann-La Roche Inc (39424)
     EXNAM Ford, John M
           Coletti, Ellen Ciambrone
     ΑG
           Gould, George M
           Johnston, George W
                               (CITED IN 007 LATER PATENTS)
              5292740 940308
     PΙ
           US
              92-896015 920609
     ΑI
           US
     PRAI CH 91-1760 911760
                               910613
           CH 92-1516
                       921516
                                920512
           US 5292740 940308
     FΙ
           UTILITY
     DT
           CHEMICAL
     FS
           6255
                 MFN: 0768
     MRN
           6319
                       0716
                       0159
           6676
           6676
                       0163
     CLMN
           33
           The novel sulfonamides of formula I,
     AΒ
```

DRAWING

in which the symbols R1-R9, Ra, Rb, X, Y and n have the significance given in the description and salts thereof can be used for the treatment of circulatory disorders, especially hypertension, ischemia, vasopasms and angina pectoris.

=> d his

(FILE 'HOME' ENTERED AT 13:47:52 ON 06 JAN 1998)

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FILE 'IFICDB' ENTERED AT 13:48:06 ON 06 JAN 1998
           9026 S ((34553 OR 34615)(L)(33696 OR 33697 OR 33698 OR 33700 O
L1
           6196 S L1(NOTL) (34211 OR 33918 OR 34128 OR 33962OR 33079 OR 30
L2
           4230 S (02797)/UN OR HYPERTENSION?
L3
            417 S MYOCARDIAL INFARCT OR 03568/UN
L4
             55 S RAYNAUDS? OR RAYNAUD?
L5
            680 S 00441 OR ATHEROSCLEROSIS
L6
              0 S 08423
L7
r_8
            381 S 08423/UN
           1408 S 00441/UN OR L6
L9
          2938 S 05859/UN OR 05860/UN
L10
          8483 S 514241000-514276000/NCLR
L11
           104 S L2 AND L10
L12
            38 S L11 AND L12
L13
           5913 S L3 OR L4 OR L5 OR L9
L14
             13 S L14 AND L13
L15
              4 S L12 AND L8
L16
             7 S L2 AND L8
L17
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L18
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L19
             24 S L19 NOT L18
L20
            927 S L11 AND L2
L21
             38 S L21 AND L10
L22
            104 S L21 AND L14
L23
            112 S ENDOTHELIN######
L24
              5 S L24 AND L21
L25
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08/718,377

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COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 97.00 97.15

FULL ESTIMATED COST

STN INTERNATIONAL LOGOFF AT 14:02:32 ON 06 JAN 1998